FEATURES

• Contractor's Corner

- Cables and cable
- Standby and emergency powerLighting

accessories

REGULARS: Buyers' guide | People on the move



STIFF SENTENCE HANDED DOWN TO IMPORTER OF COUNTERFEIT 'SAFETY CRITICAL' DEVICES

With more than 106 000 non-compliant circuit breakers and earth leakage devices not accounted for, an estimated 25 000 premises are at 'significant risk'.

or his role in importing nearly 124 000 counterfeit CBi earth leakage devices and circuit breakers from the Peoples' Republic of China, Abdool Kadar Omar Khan (55) – sole proprietor of the businesses trading under Akronix and South Star Technologies in Lenasia – was convicted in the Specialised Commercial Crimes Court, Johannesburg, on June 2 for contravening the Counterfeit Goods Act 37 of 1997 and the National Regulator for Compulsory Specifications (NRCS) Act 5 of 2008.

A raid at Khan's premises in November 2011 uncovered 17 683 counterfeit CBi earth leakage devices and circuit breakers. It was discovered that, of the imported consignments of these safety critical protection devices, 106 295 counterfeit devices had already been sold. Consequently, according to court papers, it is estimated that the people who live and work in at least 25 000 businesses and homes are potentially exposed to "significant risk", including fire, electrocution and death.

Conviction

Khan was convicted on two counts under the Counterfeit Goods Act and two counts under the NRCS Act. Between 21 September 2009 and 21 November 2011, Khan imported 123 978 counterfeit CBi circuit breakers and earth leakage devices from the Peoples' Republic of China "while knowing that those safety critical devices did not emanate from CBi and, without taking any steps to verify the authenticity of those devices".

Khan sold and distributed 106 295 of these counterfeit CBi devices to a number of customers, generating R5 353 012 from the sales, according to court documents.

Counterfeit

The remaining 17 683 devices were "detained" on 21 November 2011 according to the provisions of the Customs and Excise Act 91 of 1964. These items were examined by CBi and all 17 683 devices were found to be counterfeit in terms of the Counterfeit Goods Act. All the imported circuit breakers and earth leakage devices constitute "counterfeit goods" in terms of the Counterfeit Goods Act – the 106 295 that were sold as well as the 17 683 that were seized.

Under Counts 3 and 4, Khan admitted that he contravened the provisions of the NRCS Act as the imported devices did not comply with and were not manufactured in accordance with the Compulsory Specification for Earth Leakage protection units VC 8035 or the Compulsory Specification for Circuit Breakers VC 8036. Khan did not take any steps to confirm that the devices complied with the respective compulsory specifications and failed to keep or supply the national regulator with the records as prescribed by the Minister and without paying such fees to the national regulator as prescribed.

Sentence

On Count 1, Khan was sentenced to a fine of R1 402 191.18 (R11,31 per unit) or one hour imprisonment per unit (123 978 units) wholly suspended for a period of five years on condition that Khan does not contravene the provisions of the Counterfeit Goods Act, 37 of 1997 during the period of suspension.

On Count 2, Khan is sentenced to a fine of R199 994.73 (R11.31 per unit) or one hour imprisonment per unit (17 683 units), half of which is suspended for a period of five years on condition that the Khan does not contravene the provisions of the Counterfeit Goods Act, 37 of 1997 during the period of suspension.

Counts 3 and 4 were taken together for the purposes of sentencing and Khan received a sentence of one year in prison, which was suspended for three years on condition that, during that time, Khan does not contravene the provisions of the National Regulator for

Compulsory Specifications Act 5 of 2008.

Safety critical devices

According to the court papers, "circuit breakers and earth leakage devices are safety critical devices intended to protect the electrical installation as well as humans and animals against fire and electrocution hazards".

JULY 2016

"For this reason it is of paramount importance that circuit breakers and earth leakage devices installed in homes and businesses comply with the Compulsory Specification for Circuit Breakers VC 8036 and the Compulsory Specification for Earth Leakage Devices VC 8035. The installation of non-compliant circuit breakers and earth leakage devices could have devastating consequences, posing a significant risk to human and animal life as well as to property.

Earth leakage devices

The court papers state: "Compliant earth leakage devices detect small stray currents that may leak into equipment or living beings, which could result in damage to equipment, shock and death. During testing, the counterfeit and non-compliant earth leakage devices of the accused failed to comply with the requirements of the Compulsory Specification for Earth Leakage Protection Units VC 8035 resulting in those devices failing to interrupt the circuit when a dangerous leakage current was detected. The consequences of such non-compliant devices are significant and include electric shock with ventricular fibrillation being the main cause of death. There is also evidence of death as a result of asphyxia or cardiac arrest.

"As a result of the conduct of the accused in selling 9 235 counterfeit and non-compliant earth leakage devices, the accused has exposed an estimated 9 235 businesses and homes including humans and animals to the risks *Continued on page 3*



www.major-tech.com • f www.facebook.com/MajorTechSA/



Double Up Deal

Valid from 1 July till 30 September 2016

Test it, Label it!







For more information on this special contact us today.

Email us on info@voltex.co.za or visit www.voltex.co.za.











A JOURNEY OF A THOUSAND MILES BEGINS WITH A SINGLE STEP



REGGIE Nxumalo is the general manager of Philips Lighting Southern Africa. A natural-born leader, Reggie exudes confidence and dynamism. He is inspired and inspiring and actively encourages others to discover their true potential by enabling rather than controlling, and empowering rather than rewarding.

As a teenager, Reggie received a life-changing scholarship that provided him with unexpected opportunities and today, Reggie is passionate about giving back to the community and especially to the less fortunate.

Sparks: Where were you educated?

RN: I began my primary education in Soweto at Siyavuma Lower Primary School and then proceeded to Luyolo Higher Primary School. I had a short stint at Prudence High School and was awarded an academic scholarship by AECI to study at St Stithians College and, ultimately, at Wits University and Business School.

Sparks: How long have you been involved in the electrical industry?

RN: I've been in this industry for a little over a year.

Sparks: When and where did you start your career?

RN: My career began in 1993 at 3M SA as a marketing co-ordinator. In the same year, I was sent to Botswana to establish 3M there. I spent three successful years gaining valuable experience in business to consumer (B2C), business to business (B2B) and business to government (B2G). I then joined Numsa Investment Company and later held other senior posts at Dell Computers, Microsoft, and HP's imaging and printing division.

Sparks: What are the greatest changes you have seen over the years? RN: The progression from landline to cellular, the shift from pagers to cellular phones, from desktop to Notebook and iPad and, of course, in the lighting space the big shift from analogue to intelligent digital lighting.

Sparks: What major projects have you worked on and what is your greatest accomplishment?

RN: From time to time, I conduct entrepreneurship programmes for exconvicts through an NGO where they are encouraged to run their own businesses and to start small - even without capital. This ensures that the cycle of poverty and crime is broken as they can return to society with skills and a positive attitude. Change takes place, one person at a time \dots Sparks: Have you won any awards?

RN: Yes, I was awarded the 'Channel Executive of the Year' by CRN IT publication in 2008 - voted by the IT industry (distributors and resellers). Sparks: Who has been your inspiration or have you had a mentor who has influenced your career?

RN: Nerva Ndlovu has been a source of inspiration to me. He always listens and helps me through my thought processes and is always encouraging me and seeking to bring out the best in me.

Sparks: What, to your mind, is one of the biggest challenges facing the industry at this time?

RN: I believe that transformation is happening on two fronts: at the technology level and the business model. The technology change is from simple light sources to digital and intelligent lighting - with LED enabling this. Secondly, customers will no longer be buying lamps but investing in lighting as a service. This requires a significant change in business models and a new set of skills is required to appreciate and optimise this transformation.

Sparks: What do you enjoy most about your job?

RN: I do like juggling multiple balls and problem solving but mostly I enjoy shifting the perceptions people have about lighting and showing them that lighting goes beyond simple illumination.

Sparks: How do you motivate your staff?

RN: By engaging and listening. I find that people simply want to be heard; very often management believes they have the answers but are often pleasantly surprised when employees provide them.

Sparks: If you could 'do it all again', would you change anything? If so, what would that be?

RN: Time allocation! I would be more ruthless on how I spend time on my priorities because I have come to realise that the successful and the not so successful have the same amount of time!

Sparks: Would you advise a person leaving school to enter the electrical industry? And why?

RN: Absolutely, they will have an opportunity to shape the future as this industry moves from conventional analogue to digital LED lighting. Sparks: What is your advice to electrical contractors and/or electrical

RN: Keep abreast of the shifts in lighting technologies and save your

mentioned above. The offences for which the accused is charged are accordingly very serious."

Circuit breakers

Continued from page 1

"During testing, the non-compliant circuit breakers of the accused failed to comply with the Compulsory Specification for Circuit Breakers VC 8036. This can result in failure of the electrical installation or attached equipment, resulting in those devices becoming a life-threatening danger, through becoming a fire hazard due to inter alia the continued temperature rise within the circuit breaker itself or the conductors in the electrical installation or the appliance connected to the circuit. During the testing of the non-compliant circuit breakers of the accused, a variety of failures occurred including contact tips welding, excessive temperature rise and material characteristic not being compliant. This can result in a fire hazard, in the electrical installation as well as in equipment, resulting in destruction of property and the loss of life.

"As a result of the conduct of the accused in selling a quantity of 97 060 counterfeit and non-compliant circuit breakers, the accused has exposed an estimated 15 230 businesses and homes to the above risks, which includes all living beings within these premises."

Recertification of distributors

"CBi is of the opinion that Abdool Khan was the major importer of these counterfeit devices. In the interests of the general public, CBi has recertified all the distributors of its products to ensure only genuine CBi products are sold," says Coen Esterhuizen, managing director at CBielectric, adding that a complete list of authorised distributors is published on CBi's website.

Civil matter

A civil matter is pending in the High Court of SA Gauteng Division, Pretoria for damages suffered by CBi as a result of Khan's conduct.

Enquiries: +27 11 928 2000

According to court papers, the counterfeit CBI earth leakage devices and circuit breakers were sold to:

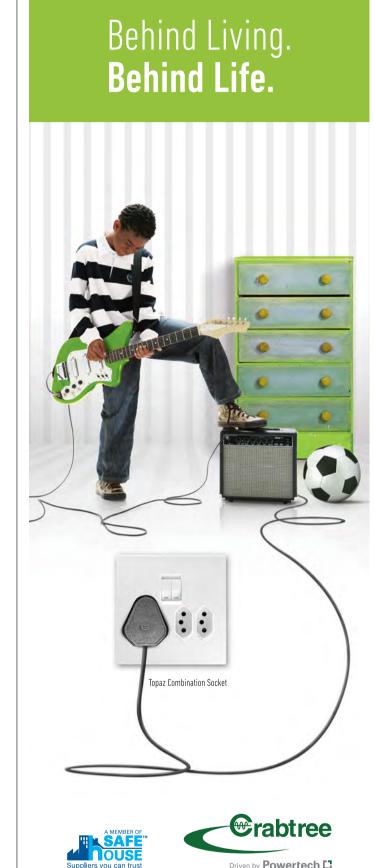
- Electrical Power Accessories in Jeppe (8 940 circuit breakers and 1 521 earth leakage devices).
- Famshir Electrical, Ormonde (32 225 circuit breakers and 3 302 earth
- Globe Electrical, Denver (547 circuit breakers and five earth leakage devices).
- Greatech, Malboro Gardens, (19 824 circuit breakers and 2 195 earth leakage devices).
- Kensington Electrical (29 020 circuit breakers and 952 earth leakage
- Manstel Projects, Germiston (400 circuit breakers and 102 earth leakage
- Soweto City Electrical (2 319 circuit breakers and 93 earth leakage devices).
- (1680 circuit breakers). Tuscaloosa Venus Electrical (964 circuit breakers and 50 earth leakage devices).
- Voltsing, Hillfox (1 452 circuit breakers). Nasco Plumbing, Booysens (9 618 circuit breakers and 220 earth
- leakage devices). Electrical Protection AC (1344 circuit breakers).
- Bobs Hardware, De Deur (656 circuit breakers and 60 earth leakage
- Gauteng Electrical (984 circuit breakers and 40 earth leakage devices).

customers money by moving to LED through reputable brands that are able to back up their warrantees.

Sparks: What is your favourite quote?

RN: "A journey of a thousand miles begins with a single step." Lao Tzu. Sparks: Name three things on your 'bucket list' (things you want to do before you 'kick the bucket').

RN: I would like to visit 100 countries with my wife; watch the Wildebeest Migration in the Masai Mara; and write and publish books.



Use a circuit breaker in the management of a microgrid? Certainly.



Power and productivity for a better world



SACE Emax 2, not just a circuit-breaker, but a true power manager that controls every electrical system, increasing efficiency. SACE Emax 2 protects the system, manages loads and generators, measures and analyses energy quality, with the simplicity and reliability you would expect. For further information: www.abb.co.za/lowvoltage

ABB South Africa (Pty) Ltd. E-mail: LP@za.abb.com



LEGAL MATTERS THAT MATTER ... A LOT!

n this month's column, I am going to try to get electrical contractors to grasp some of the legal issues that could arise from working on site – with three stories, which serve as examples of what could go wrong.

Hot work

In the first case, a consulting engineer (that's me) specified that the roof of a particular building should be constructed in three layers: the layer immediately beneath the roof sheeting was to be board, which was not flammable; below that,

there was to be a layer of spun fibreglass sheeting; and below that, another fireproof board.

As it turned out, the roof was built without the fire-resistant boards and, instead, shutter plywood was used. During construction, the roof caught alight and was completely burnt out. The contractor had to replace the roof and, later, I was very surprised to learn that I had been named as being responsible – along with the rest of the professional team – for the design, which had resulted in the roof being destroyed by fire.

A fire engineer and a quantity surveyor were also on the project and we were all sued, despite the fact that my specifications had been ignored during construction. At the end of the day, it was shown that the contractor had allowed a subcontractor to work with an open flame without a hot work permit and the matter should have been dropped. But it hasn't been and, although it does seem that I'm no longer being sued, I continue to get reports of legal processes, which indicate that there is still a claim of some sort.

SEE US AT



The second story involves a man who, early one morning, was found in a warehouse in which an electrical contractor had stored full cable drums. The man was trapped underneath one of the cable drums with a badly injured leg. The man subsequently sued the owners of the warehouse, the electrical contractor and the suppliers of the cable drum. He claimed that he had broken into the warehouse because he was freezing outside and he wanted a warm place to sleep. In the dark, he had walked into a cable drum, he said, and it had rolled onto his leg.

Stripped pieces of copper wire were discovered near the cable drum where the man had been found. Despite the fact that he had obviously been stealing copper, the judgement went against the respondents and they had to pay out on the basis that (a) the electrical contractor had not adequately secured the drums, and (b) there was no notice or sign to inform anybody about the inherent dangers of moving cable drums.

Seeing the light

During the revamp of a church, an electrical contractor had to rewire and re-lamp a whole lot of lamp fittings, which hung from various stone beams in the vestibule. The new fittings were heavier than the old fittings and the contractor was concerned that one of the lamp fittings, fastened to a beam, could pull out and potentially fall onto a person below.

The builder assured the electrical contractor that this could not happen because the fixture was attached to the beam using high-strength structural glue. He demonstrated this by hanging a sack of cement from the fixing point. The electrical contractor nevertheless asked the structural engineer to review the matter and paid a fee for this service. The structural engineer found no problem with the fixing.

Some 10 years later the fixture pulled out of the beam and fell to the ground below – fortunately not injuring anyone. However, the church, the builder, the electrical engineer, the electrical contractor, structural engineer and architect were all sued by a member of the public, who claimed to have suffered anguish when the light fitting fell.

The structural engineer investigated the matter and found that the failure had been due to the ageing of the beam and thus the claim was dismissed.

Safety first - always

What do we learn from all this? Simply put: personal safety and the safety of all your work when on site is extremely important. Equally important is to remember that lawyers make money out of one party claiming from another. No matter how much time elapses or how unlikely the claim, they will claim if they can. And they will claim from you

Bear this in mind. Always ensure that you have written records as to who is responsible for anything, including that which isn't specifically electrical work. Always.



www.mce.co.za

IGNORANCE CAN BE DEADLY

The scourge of sub-standard electrical products on offer in South Africa and the consequent safety risk to users has prompted the SAFEhouse Association to compile a series of product guides.

These guides are funded by the association's members in the interest of users and are available on the SAFEhouse website.

Download your FREE copy of the SAFEhouse guides from www.safehousesa.co.za



The SAFEhouse Association is a non-profit, industry organisation committed to the fight against sub-standard, unsafe electrical products.

For more information contact:

Pierre Nothard: 011 396 8140 Email: pierren@safehousesa.co.za

www.safehousesa.co.za



SAFEhouse members have signed a code of conduct: Your assurance of commitment to offer only safe electrical products.







































































power outages on the main grid supply.

ABB INAUGURATES MICROGRID IN SA, BOOSTING RENEWABLES AND POWER RELIABILITY

ABB commissioned an integrated solar-diesel microgrid installation at its 96 000 m² Longmeadow facility in Johannesburg, South Africa. This is a world premiere for the innovative solution with fully gridconnected and off-grid functionalities designed to maximise the use of renewable energy and ensure uninterrupted power supply to keep the lights on and the factories running during any planned or unplanned

South Africa has the highest electricity consumption in the sub-Saharan region and demand continues to outpace supply. Power shortages, fossil fuel price volatility, environmental concerns and the increased focus on renewable energy sources like wind and solar, are leading to the search for sustainable solutions. South Africa is not alone when it comes to power shortages and outages and several other emerging economies in Africa, Asia, South America and other parts of the world face similar challenges. There are thousands of facilities that could leverage such a microgrid solution to address the matter.

ABB's microgrid installation in Johannesburg comprises its compact and versatile Power Store battery-based grid stabilising system to address frequency and voltage fluctuations. It also includes a Microgrid Plus distributed control system (DCS) to manage the supply of power and balance the fossil-fuel and renewable energy sources in accordance with loads, in a coordinated manner, enabling access to utility grade power.

The 1 MVA/380 kWh PowerStore and Microgrid Plus, together with a 750 kW rooftop photovoltaic field have been added to the existing back-up solution at the location to boost renewables and provide continuity of supply during disruptions or transitions from grid to island operation. The modular and containerised microgrid solution is pre-designed for this type of application. A cloud-based remote service system will be deployed for the operations and maintenance of the microgrid in keeping with ABB's Internet of Things, Services and People (IoTSP) approach.

"This innovative microgrid solution helps address a real-world challenge by providing stable and cost-effective continuity of power supply while minimising environmental impact," said Claudio Facchin, President of ABB's Power Grids division. "Penetration of growth markets like Africa and leveraging innovative technologies such as microgrids to improve power reliability are key elements of ABB's Next Level strategy."

ABB is a pioneer in microgrid technology with more than 30 global installations across a diverse range of applications serving remote communities, islanded grids, utility grid support and industrial cam-

Enquiries: +27 10 202 5090

NEW PRODUCTS LAUNCHED AT AFRICAN UTILITY WEEK

▶ BI-electric had much to showcase at African Utility Week, with the launch of its new NanoView Energy and Water Monitor, USB socket outlet as well as showcasing its comprehensive range of products.

The newly launched CBI-electric NanoView allows household and commercial consumers to easily manage their electricity and water usage. By displaying live data in both monetary and consumption terms (i.e. energy in W and kW; and water in litres and kilolitres), users can quickly determine which appliances use more energy and which appliances cost the most to operate. With this data, the customer can now make energy wise decisions. The cumulative usage mode on the monitor displays consumption for the past day, week or month and is a great tool to manage budgets and evaluate progress in achieving a greener lifestyle.

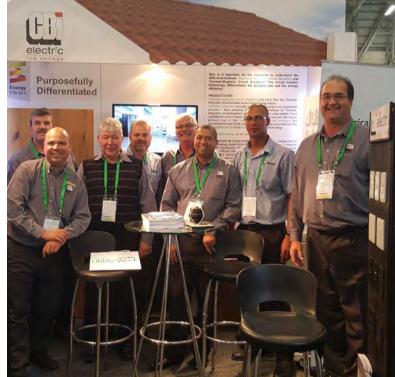
CBI-electric's new aesthetically pleasing USB socket outlet is a standard 240 V ac Euro socket outlet with a standard SA socket outlet

and two integral USB ports. In addition to the option of two complementary plug sockets, it has two integral USB ports.

Charl Osborne, CBI-electric's commercial executive says that CBI is continually looking to develop new products and solutions that meet the needs of our customers. With the introduction of this product range, customers no longer require a USB adapter, they can plug right into the wall socket outlet to charge their electronic devices.

With the introduction of renewable energy into the mainstream market and the drive for higher data performance of systems, companies are looking to push the boundaries of how dc can be applied. With all of the advances in dc usage, dedicated dc protection equipment is essential to ensure the safety of systems, equipment and people. CBI-electric has a comprehensive range of dc miniature circuit breakers (MCBs), dc moulded case circuit breakers (MCCBs) as well as a range of accessories suitable for

> providing protection for any dc system. Data centres have traditionally been operated at low voltage dc. However, with the increased data traffic around the world, the advantage of using higher dc voltages is being realised. It can reduce the hardware in the system, but at the same time increase the energy throughput, thus aiding in the volume of data that can be transferred between locations.



Manning the CBI-electric stand at African Utility Week are: (back) Cameron Giraudeaux (regional manager: Africa); Manie Lombard (regional manager: Freestone / Northern Cape); (middle) Stewart Wilson (regional traditional sales manager: Western Cape); Dirk Taljaart (regional manager: KwaZulu-Natal); Selwyn Williams (sales representative: Western Cape); Enver Hugo (sales representative, Western Cape); (front) Jaco Viljoen (national sales manager); and Ozzie van Oosten (regional manager: Eastern Cape).

Enquiries: +27 11 928 2000

ESKOM TO GIVE SMALL BUSINESS A BOOST

AT LEADING BUSINESS EXPO

ESKOM is set to recognise leading small businesses, showcase promising SMEs and give entrepreneurship education a boost during the upcoming Small Business Expo at the Ticketpro Dome in Northriding, Johannesburg to be held from 8 to 10 September.

Through the Eskom Development Foundation, Eskom supports entrepreneurship and small business development at this leading small business event. At the Small Business Expo 2016, Eskom will announce the winners of the annual Eskom Business Investment Competition (BIC), in which substantial prizes aimed at building sustainable businesses are awarded to blackowned businesses in the manufacturing, engineering and construction, agriculture and agri-processing, services and trade industries.

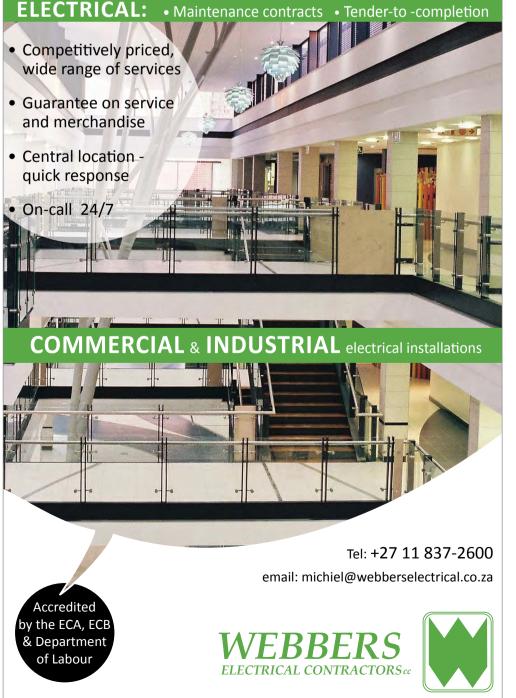
"Eskom believes small business is the key driver of economic growth and job creation in South Africa. By investing in entrepreneurial education, training and the application of practical business skills from school level to eventually mid-sized businesses, Eskom aims to deliver maximum benefit through its entrepreneurship programmes and initiatives," says Chris Bornman, Eskom Foundation marketing and project manager.

"An important element of Eskom's business development initiatives is its partnership with Small Business Expo. The expo's focus is in line with the Eskom Development Foundation's own goals - developing entrepreneurial skills and sustainable small businesses in South Africa, and connecting prospective partners in small

As a show of its commitment to the growth of small business, Eskom will also provide an opportunity for black-owned SMEs to exhibit at the expo.

With different focus areas, the co-located expos will serve as a hub for all businesses, partners, investors and customers. Small Business Expo, in partnership with Eskom is devoted to the development and growth of small and medium enterprises by providing an opportunity for these businesses to market themselves and interact with corporates and investors. #BuyaBusiness expo will connect entrepreneurs and investors who are looking to grow, diversify or enter business partnerships with one of the many business and franchise opportunities to be showcased. Valuable information sessions, workshops and business networking opportunities will run throughout both expos.

SMEs interested in exhibiting at the Small Business Expo can contact Trevor Mochaki at Trevor@ThebeReed.co.za





RANGE OF CIRCUIT BREAKERS EXCEEDS INTERNATIONAL SAFETY STANDARDS

ACDC Dynamics, the sole distributor of Terasaki in South Africa, offers a full range of the world recognised Terasaki moulded case circuit breakers (MCCBs) and air circuit breakers (ACBs). "The Terasaki TemBreak2 range of circuit breakers has specifications that exceed international standards for safety," says ACDC Dynamics' Dirk Holm.

"A direct opening action, which is recommended by IEC standards for machine safety, is a standard feature in most Terasaki models and ranges. A unique safety-lock system for plug-in MCCBs ensures that the MCCB cannot carry current while being fitted or removed, which is an essential safety feature for the operator and maintenance staff," he explains.

Holm says there are 10 beneficial reasons to use TemBreak2 circuit breakers:

Field installable accessories: There is one common accessory, one

size accessory fits all, from 20 A to 1 600 A that can be fitted by the switchboard builder or added by the end user.

Users can now benefit from the common design of TemBreak2 MCCBs as shunt trips, auxiliary switches and alarm switches are uniform throughout the range and are easy to install in the field.

Safety lock: The plug-in MCCB is locked to the base when the toggle is 'on'. It cannot be removed unless the toggle is 'off' or has tripped.

Symmetrical door cut-out patterns: Door cut-out patterns for external operating handles are symmetrical, even when breakers are mounted in opposite directions.

Superior temperature performance: All TemBreak2 MCCBs are fully rated for use at 50 °C (ambient).

Modular sizes: The range offers five frame sizes from 12.5 A to 1600 A, for example, 125 A

to 160 A; 250 A to 400 A; 630 A to 800 A; 1000 A to 1250 A; and 1600 A.

Compact motorised changeovers: The mechanical interlock is installed on the front of the

MCCB and is compatible with clip-on motor operators and integrated operating handles.

With some of the fastest operating speeds in the industry making synchronization a breeze.

Direct opening: The direct opening function conforms to IEC 602041 safety standards for electrical machinery and equipment compatibility.

Visual safety: A clear toggle (MCCB) and illustrative flags (ACB) to indicate the position of the breaker whether in 'open', 'close' or 'trip' position.

Acquisition of telecomms product supplier announced

CDC Dynamics has announced the acquisition of the business of Jemic International Trading (previously Televes South Africa) as a going concern.

ACDC Dynamics is a leading manufacturer, importer and distributor of quality products in the electrical, electronics, pumps and tools industries. The acquisition adds a comprehensive selection of SMATV reception and distribution equipment, including equipment for coaxial (copper) distribution and fibre optic equipment, to the ACDC Dynamics' product offering. In addition to acting as a distributor in South Africa for, amongst others, the Televes range of products, ACDC Dynamics also offers a comprehensive range of related services that include site inspections, network analyses, system design and project management. Luis Dos Santos, the founder of Jemic International Trading, will join the ACDC Dynamics team. He says: "I am excited by the opportunities this will open up for suppliers and customers. Our suppliers will gain access to ACDC's extensive distribution network while our customers will benefit from the support of a large team of professional staff at ACDC."

Mario Maio, managing member of ACDC Dynamics, says, "We are very happy to welcome Luis and his team to the ACDC family. This acquisition is in line with our strategy to continue expanding our offering of high quality products.

Enquiries: +27 10 202 3300

Unsurpassed flexibility: Overload protection (Ir) is adjustable between 63% and 100% of the rating. Short circuit protection is adjustable 4 to $13 \times (ln)$.

Terasaki's two dial electronic overcurrent relay: This relay has the same design throughout the range, covering ratings from 12.5 A to 1600 A. Terasaki has extended the range of the popular MCCBs with new models from 800 A to 1600 A. The new 1000 A model is the same frame size as Terasaki's existing XS800 (height = 273 mm; width = 210 mm; depth = 103 mm).

In addition, the 125 kA and 200 kA breakers in an 800 A frame are now available in the new range. The Terasaki plug-in versions of the new 800 A frame model is available in South

Africa. The new MCCBs all feature direct opening action to IEC 6094751. This is a safety feature that is important for isolating

machinery and is indicated by the direct opening action symbol on the nameplate. Only breakers made by Terasaki currently carry this safety mark.

Independent tests

TemBreak2 circuit breakers are tested in independent laboratories as well as in Terasaki's own laboratory in Osara Japan. Terasaki circuit breakers are approved by leading marine approval organisations such as KEMA, ASTA, Bureau Veritas and Lloyds of London.

ACDC's technical specialists can assist with the selection of the most appropriate solution for various installations. For more information, contact category specialist, Dirk Holm, at switchgear@acdc.co.za or visit www.acdc.co.za to see the complete range of Terasaki circuit breakers.

Enquiries: +27 10 202 3300



ZE125-NJ





AIR CIRCUIT BREAKERS

The Terasaki TemPower2 ACB is the result of an intensive market research program which took into account the requirements of switchboard builders, consultants and end users. Futhermore it is one of the smallest ACB's in the market with a 1 second rating (CW).

TemPower2 is the world's first "double break" system, resulting in the world's smallest depth which leads to space saving in switchboards.

The Terasaki Tempower2 ACB can easily be retro-fitted by our service department.

When thinking about innovative circuit protection, think ACDC Dynamics. Direct Service, Dynamic Solutions.

SPECIALACE 2016 PRICING

Buy an ACB in 2016 and receive a **FREE** service in 2017.

For more information contact switchgear@acdc.co.za

XV125-NJ

BRANCH CONTACT DETAILS

 Johannesburg:
 010 202 3300

 Germiston:
 011 418 9600

 Cape Town:
 021 492 2000

 Pinetown:
 031 700 4215

 Riverhorse:
 031 492 4800

NATIONAL CALL CENTRE
Sales 010 202 3400
Technical 010 202 3500

WWW.acdc.co.za



SHAKING THE REGULATIONS TREE - IN A GOOD WAY

o, we've completed our tour of the definitions of the Electrical Installation Regulations that form part of the Occupational Health and Safety Act. From this point onwards, we will discuss the balance of the Regulations – the Electrical Installation Regulations 2009 to be precise – remembering, of course, that the Regulations are an extension of the Occupational Health and Safety Act (Act 85 of 1993).

The Regulations can also be seen as a sort of 'broad strokes user manual', so to speak. What I mean by that is that the Regulations tell you how to approach things and how to do them in a little more detail than described in the Act itself: Who takes responsibility for what and, for further details, the Regulations refer us to more detailed documents such as the South African Bureau of Standards' South African and International Standards.

Somehow the words, "Souma Yergon, Sou Nou Yergon, We are shakin' the tree" from the 90s song called, 'Shaking the Tree', keep on milling about in my head. I cannot recall exactly, but the original artist has recorded at least five different versions of this particular song. The version milling about in my head features a singer born in Dakar. In 1985, this singer organised a concert to celebrate the release of Nelson Mandela and in 2012, went on to become Senegal's Minister of Tourism and Culture. So, why shake the tree, you may ask. I certainly have had my fair share of the 'know-alls' with a non-electrical background shaking my tree. And not in a good way, either. My interpretation of shaking a tree, is to see what happens when you shake it and things start falling out of this tree ... or don't. It's strange how certain words only make sense perhaps hundreds or thousands of years after they have been uttered or written on parchment or painted on rocks. It is also strange how words spoken by those close to you, but who are no longer there, come back to uplift you when you are supposed to be mourning their passing. Many of these words or quotes revolve around responsibility and positive actions – have you noticed?

And this brings us to ...

Responsibility for electrical installations

2 (1) Subject to subregulation (3), the user or lessor of an electrical installation, as the case may be, shall be responsible for the safety,

safe use and maintenance of the electrical installation he or she uses or leases.

(2) The user or lessor of an electrical installation, as the case may be, shall be responsible for the safety of the conductors on his or her premises connecting the electrical installation to the point of supply in the case where the point of supply is not the point of control.

The above is not all that difficult to understand actually. Take a metering point on your boundary, for instance. The Regulations just say you have to take care of the conductors between the metering point (point of supply) to your main distribution board (point of control). It should be obvious that the 'supply authority' has little or no control over what happens inside your premises. The same goes for overhead conductors over your property from the pole in the street to the side (or roof) of your house. This is contrary to an old misconception, still front of mind for many, that the supply authority is responsible for the integrity of the electrical installation up to my main distribution board.

Next, we look at the rest of the responsibility for electrical installations, which includes obtaining a Certificate of Compliance, for instance. Subregulations (1) and (3) must preferably be read as one thought, to really get the gist of what the legislator want to get across to the reader.

(3) Where there is a written undertaking between a user or lessor and a lessee whereby the responsibility for an electrical installation has been transferred to the lessee, the lessee shall be responsible for that installation as if he or she were the user or lessor.

Read subregulations (1) and (3) carefully as one? So, here's the thing: A Catch 22 situation, so to speak. You rent a shop or a flat. Now watch as a mini war erupts when something goes wrong with the electrical installation inside that shop or flat and the responsibilities contemplated in subregulations (1) and (3) have not been spelt out properly in the lease contract documents. Someone can be lumped with the responsibility of getting a valid Certificate of Compliance that they did not budget for. The horror of being held liable when someone is injured by an electrical installation that, in actual fact, belongs to someone else, is just too much to think about. It's much like having to write off your car after an accident and, on top of that still owe the bank

for the balance outstanding on your car, because your insurance cover is deemed inadequate.

Next we move onto the 'industry's police'...

Approved inspection authorities for electrical installations

3. (1) The chief inspector may approve any person that has been accredited by the accreditation authority as an approved inspection authority for electrical installations.

(2) An application to be an approved inspection authority shall be made to the chief inspector in the form of Annexure 2 together with

(a) A certified copy of the accreditation certificate issued by the accreditation authority; and

(b) The fee prescribed by Regulation 14.

(3) An approved inspection authority for electrical installations shall inform the chief inspector of any change affecting its approval in terms of these Regulations within 14 days after such change.

The above seems pretty straight forward... we will find out soon.

Functions of approved inspection authorities for electrical installations

4. (1) An approved inspection authority for electrical installations may enter premises and conduct an inspection, test or investigation only when

(a) Contracted by the chief inspector or provincial director for a specific electrical installation; or

(b) Requested by the user or lessor of an electrical installation to do so.

(2) An approved inspection authority for electrical installations may not operate as an electrical contractor.

Now, whatever is written in Regulation 4 is very important – for what it says and also for what it does not say. Is there a tree (or trees), waiting to be shaken?

So, in parting, another few words from that song, 'Shaking the Tree': "Make the decision that you can be who you can be; Changing your ways, changing those surrounding you; Changing your ways, more than any man can do ..."

Hopefully, if you set an example by adhering to the rules, others will follow you.

Till next time.

HIGH VOLTAGE GAS INSULATED SWITCHGEAR BOARD GOES TO

NEW SEBENZA SUBSTATION

ABB South Africa has delivered its largest 132 kV high voltage gas insulated switchgear board as part of a multi-million rand order to City Power's new Sebenza intake substation. The new 1 000 MVA 400 kV/275 kV/132 kV Sebenza intake substation near Kempton Park will strengthen City Power's distribution network growth.

ABB was awarded the high voltage switchgear order by Consolidated Power Projects (CONCO), an EPC (engineering, procurement and construction) contractor appointed by City Power to provide the turnkey substation. PSW Consulting Engineers provided consulting engineering services for the project to ensure compliance to specifications.

The ABB scope of supply includes the design, manufacture, testing, supply, delivery, installation and commissioning of 132 kV GIS (gas-insulated switchgear); 400 kV circuit breakers; 275 kV circuit breakers and surge arresters; 132 kV circuit breakers; 88 kV surge arresters and point of wave relays (switch sync).

The 132 kV GIS board comprising 38 bays is the largest such high voltage board ABB has supplied in Africa. Gas-insulated high-voltage switchgear (GIS) is compact metal encapsulated switchgear consisting of high-voltage components such as circuit-breakers and disconnectors, which can be safely operated in confined spaces.

"ABB is a leading innovator in GIS technology especially in the areas of ratings, operations, switching technology, smart control and supervision, and compactness," says Confidence Mabulwana, product group manager high voltage products, ABB South Africa. "As a result, ABB's GIS offers outstanding reliability, operational

safety and environmental compatibility".

The order for the ABB HV switchgear was placed at the end of 2014 and the products were all delivered in November 2015. The installation and commissioning is scheduled for the beginning of March 2016 and commissioning is planned for completion at the end of September 2016.

The 132 kV GIS equipment was manufactured in Germany while the 132 kV to 400 kV AIS circuit breakers and surge arresters were manufactured in Sweden. ABB is responsible for supervision of all installation and commissioning. South African based company SWITEC is responsible for all installation of 132 kV GIS under supervision of ABB as a part of contract.

"The project has been successful because of the partnership involving different stakeholders including the consultant, end-user and contractor working together on the technical issues," says Faith Magobolo, project manager at high voltage HV products for ABB South Africa. "The sheer size of the project we have been able to execute places us in a good position for similar projects."

ABB offers a comprehensive range of high-voltage products up to 1200 kV ac and 1100 kV dc that help enhance the safety, reliability and efficiency of power networks while minimising environmental impact. ABB's high voltage products include circuit breakers, disconnectors, instrument transformers, surge arrestors and capacitors to utilities, mining, industry and renewable energy power producers.

Enquiries: +27 10 202 5000

AMEU APPOINTS NEW STRATEGIC ADVISOR

HE Association of Electricity Utilities of Southern Africa (AMEU) has appointed Vally Padayachee to the position of strategic advisor with effect from 1 June 2016. In this, Padayachee will report to AMEU president and the executive council of the AMEU.

Padayachee is no stranger to the AMEU and the electricity industry. He was the executive of City Power, the first black president of the AMEU and a member of the executive council of the organisation that was commemorating its centenary celebration last year.

Padayachee holds a MSc (Eng) from the

University of KwaZulu-Natal as well as an MBA through Henley Business School in the United Kingdom. He is a seasoned engineering professional and executive with over 35 years' experience in the private sector and power utility environments. He has worked in the petrochemical, power and energy fields both locally and internationally.

Padayachee has held senior management and executive level positions at Eskom. He served in a number of roles at City Power, including vice president of operations, vice-president of customer services and retail, and director of engineering operations.

Before he was appointed to this position, Padayachee was the CEO of PDNA Mott MacDonald Resources and Energy and as a board member and group executive director of Altron Power (Powertech).

Among his string of career accolades,

Padayachee also served as EXCO member of the Engineering Council of South Africa (ECSA), as council member the Institution of Certificated Mechanical and Electrical Engineers of South Africa (ICMEESA) and as editor of The Certificated Engineer for a number of years.

Says Padayachee: "I am excited by this appointment and the opportunity to come back into the AMEU fold. I am looking forward to learning from my colleagues and contributing to the growth and development of the AMEU and the electricity sector."



AMEU President, Sicelo Xulu adds: "We are pleased and delighted to have someone of Padayachee's calibre at the AMEU. We are confident that his wealth of experience will augur well for the continued success of the organisation and in turn the electricity industry."





Is training during a recession essential or just 'nice to have'?

LET'S begin by looking at a definition of 'recession':

Recession – a period of temporary economic decline during which trade and industrial activity are reduced, generally identified by a fall in GDP in two successive quarters ...

Now, when there is a recession, people are more inclined to save money because there is a fall in confidence. Second, if people expect that they may become unemployed because of the recession, they don't want to spend and borrow, it is less risky to save.

What about spending money on training during a recession? Is it essential or is it just a 'nice to have' activity? Now, before you ask how I can say we are in a recession when there are economists who say South Africa is not out of the woods yet and, according to finance minister, Pravin Gordhan, South Africa can avoid a recession through better co-

operation between the state and private sector; the point that I am trying to make is that if we are aware that there is a possibility that we could slide into a recession, we need to consider how we will tackle training and development during this challenging period. How you prepare to navigate through the tough times will be important because it ultimately determines whether your company sinks or survives and thrives when the better times arrive.

Those of us who went through the 2009 recession will remember that the training and development budgets were the first expenses to be scrapped or severely cut back. Before resorting to this approach, you should calculate the impact a recession may have on learning and development within your company, remembering that the organisations that step up efforts to develop employee skills and competencies in the face of a downturn (often with reduced resources), are more likely to emerge stronger and more resilient when the upturn begins.

If you need more encouragement or any justification to keep a firm grip on your training budget during this recession, consider the six reasons outlined by the Institute of Directors in the UK who discuss

ERGONOMIC SCREWDRIVER

SETS WITH 40% MORE TORQUE



iha Germany recently introduced two top-of-the range 12-piece screwdriver sets with its patented handle – namely the SoftFinish standard and the SlimFix VDE 1 000 V series. The two new sets feature an extensive range of the most popular sizes of screwdrivers needed to do most jobs. The ergonomically perfect multi-component handles on these screwdrivers allow all fingers to be placed on the handle, achieving 40% more torque than conventional handles. The SLIMFIX models are 1 000 V rated and the blades are 33% narrower, allowing unlimited access – even to spring clips. Both models have roll off protection.

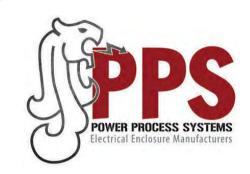
Enquiries: +2711 396 4065

the competitive advantages for those companies who do not cut their training spend in a recession:

- Ensure that your business is well-positioned when the economy starts to recover. Those businesses that do not survive will open up market share to those who do.
- Remain competitive. If your employees are knowledgeable and motivated, they will find new ways of generating revenue.
- Understand your customers' buying habits and how you can build on their loyalty. You need to maintain repeat business in a recession.
- Enable your employees to stand back from the day-to-day operations and understand the strategic implications of their work sends one of the most powerful messages to your employees that they are valued. When your employees are anxious about job security, it is
- more important than ever to demonstrate a commitment to them.
- Avoid a long term skills shortage among your employees. UK businesses are still recovering from skills lost during the 1990s recession due to poor investment.
- Training increases productivity in the short term as well as the long term. The sooner you engage your staff, the earlier you can address and deal with the impact of the recession.

It is important to determine the impact of the possible recession on learning and development, identify key positions and ensure that you train and maintain these key staff members – and when the upturn begins, you will be ready to reap the rewards.

http://www.fullpotentialgroup.co.uk/blog/TrainingThroughRecession



Western Cape

Postnet Suite 329, Private Bag X15, Somerset West, 7130 **T:** +27 21 845 4108 / **F:** 0866 892 718

Gauteng

Po Box 4172, Southgate, 2082 F: 011 494 3572

National Tel Number: 0861 777 769 (PPS POW)

michael@ppspower.co.za www.ppspower.co.za

25 Years of Quality Products.

25 Years of Satisfied Customers.





















Assemblies manufactured to SABS 1765 for the safety of distribution boards





NEW HIGH CURRENT LOW RESISTANCE TESTER WORKS YOUR WAY

MEGGER'S new DLRO100 digital low resistance ohmmeters are readily portable lightweight instruments that can deliver a test current of 100 A. They can be supplied with internal rechargeable Li-ion batteries that provide sufficient power for up to 200 manual/automatic tests on a single charge. This makes it easy for users to perform high-current low-resistance testing in almost any location, even if there is no access to a mains supply.

To ensure dependable operation even in the most demanding environments, the new DLRO100 instruments use novel circuitry that gives high noise immunity and guarantees stable readings. For physical protection they feature enclosures with an IP54 ingress protection rating even when the lid is open and testing is in progress.

Operator safety in adverse conditions is assured by a CAT IV 600 V safety rating in line with IEC61010. With and optional dc clamp, dual-ground operation is also supported. This greatly enhances safety when working in substations and similar environments by allowing tests to be carried out with both sides of the equipment under test grounded.

DLRO100 instruments have a wide range of applications, including checking the resistance of busbar and cable joints, measuring wire and cable resistance and verifying lightning conductor bonding. They are also well suited for testing switchgear and circuit breakers during manufacture and in the field, and they offer a smooth DC output that is particu-



larly valuable for circuit breaker tests.

Instruments in the DLRO100 family have a measuring range of 0.1 $\mu\Omega$ to 1.999 Ω with a resolution of 0.1 $\mu\Omega.$ Results are shown on a large LCD display panel and, depending on the model, can also be stored in a large capacity internal memory for later access via the display or downloading via USB. Versions are also available with support for remote operation, Bluetooth connectivity and asset/result tagging.

All models offer a choice of test modes. Manual mode allows the user to initiate the test once the probes are in contact with the object under test. When the test button is pressed, the instrument performs a single test. In 'auto' mode, as soon as the potential leads are connected, the test starts automatically. To repeat a test, the user simple breaks and remakes contact with the potential leads.

In 'continuous' mode, the user connects the test leads and presses the test button. The instrument will continue to test, updating the display after each new test cycle, until the test button is pressed again.

For use with its new DLRO100 digital low-resistance ohmmeters, Megger offers standard and Kelvin lead sets. These are available in lengths of 5, 10 and 15 m, and all have a CAT IV 600 V rating.

Enquiries: +27 11 391 3832

Interbuild Africa 2016:

sourcing building and construction material and resources under one roof

n the wake of what has been one of the most challenging economic periods for the building and construction sector, small- to medium-sized building contractors are carving out niche opportunities that were previously more accessible to larger competitors. With competitive pricing and entrepreneurial drive, smaller building and construction companies are making a significant impact on market growth.

Taking place at the Johannesburg Expo Centre, Nasrec from 17 to 20 August, Interbuild Africa is one of the largest building and construction trade exhibitions in Africa, and a show that is specifically targeted at the small- to medium-sized building contractor.

In addition to showcasing the widest range of building and construction materials, equipment, technology and services, Interbuild Africa 2016 will host a free-to-attend seminar theatre, where visitors can learn all about the latest trends impacting on the sector. Interbuild Africa has also partnered with leading industry bodies to host a number of high profile conferences and workshops.

Interbuild Africa is co-located with four other industry leading events: Glass Expo Africa, Plumbdrain Africa, EcoAfribuild and Hardex Africa.

Interbuild Africa will also host new features, including a dedicated A-OSHExpo Pavilion, showcasing the widest range of occupational health and safety products, equipment and services.

Visitors can pre-register online at www.interbuild.co.za





TRAX is a multifunctional transformer and substation testing solution that replaces numerous individual testing devices. It's a time saving and cost-effective alternative to conventional measurements with separate instruments. For further information contact mesales@megger.com

Megger Ltd, P.O.Box 15777 Kingdom of Bahrain, T. +973 1774 0620

MeggerAfrica





CITY POWER WINS PRESTIGIOUS AWARD

ity Power has scooped the much-coveted 'Power Utility of the Year' award at the Africa Utility Awards, which were held in Cape Town, recently.

The Africa Utility Week is a leading annual power and water industry that attracts over 6 000 attendees and 80 utilities from across the continent.

The Power Utility of the Year award recognises the power utility in Africa that excels in any one or more of the following fields: service delivery, project roll-out, technology roll-out, revenue protection measures, loss reduction, grid integration and new energy sources, including company contribution to sector growth, demonstrated expenditure reduction, increased capacity to deliver services and revenue collection, completion of infrastructure development or sustainable maintenance projects.

City Power was vying for this much-sought award with a number of utilities from across the continent, namely Ghana Grid Company Limited, KenGen from Kenya, Kenya Power and Lighting Company Limited and Volta River Authority from Ghana.

Says Sicelo Xulu, City Power managing director: "We are pleased that once again the diligent work that has been done by the City Power team has been recognised and acknowledged. This award is an affirmation of the hard work that has been done by the City Power team, and this accolade galvanises us to work harder to provide our customers with the superior service they deserve."

City Power introduced a range of interventions aimed at curtailing power consumption and lessening the potential for load shedding in its area of supply in Johannesburg.

These cutting-edge solutions include load limiting, a first solution of its kind to be implemented in South Africa that enables City Power to remotely disconnect households that uses electricity excessively when the grid is under pressure.

Through its expansive network of smart meters across Johannesburg, City Power can remotely monitor households' usage and request them to reduce consumption when the grid is constrained. In the event of non-compliance, the power is remotely disconnected. The power will return at intervals, giving the household the opportunity to reduce consumption to the required levels. When the required threshold is not reached, the household is disconnected completely throughout the load shedding duration of four hours.

City Power has also developed a load limiting application, a free app that is compatible with Andriod and iOS operating systems, which, amongst others, alerts residents of load limiting schedules and allows them to disconnect power remotely.

Through the implementation of load limiting, City Power has had to implement only 41 of the 220 requests from Eskom to shed load, thanks to the excess capacity created through load limiting.

COOL TOOLS FOR CONTRACTORS

THREE-D Agencies, a subsidiary of Hudaco, has complement its current range. "Maxtorque Supreme tools are designed and tested to stringent standards and offer quality and feel at an affordable price," says Mark Jenkins, sales director at Three-D Agencies.

The range comprises of insulated screwdrivers up to 1 000 V; mechanical screwdrivers; precisi screwdrivers; demolition drivers; and voltage testers. The screwdriver tips are made from premium chrome vanadium (CRV) quality material (54 to 58 HRC) designed to withstand the toughest knocks, and the handles are a superior slip-resistant tyre grip, which

Jenkins explains that the range also includes the Maxtorque torch range, which comprises a mini keychain torch with an 18 m focused beam; a super focus torch with an adjustable beam of up to 200 m; and a two-inone headlamp torch with three light modes, which can be detached from the head strap.

All the torches are made from aircraft aluminium, have a drop resistance of 1 m and are IPX4 water resistant.

Enquiries: +27 11 392 3804

City Power was also recognised for introducing a solution called 'ripple control', which disconnects geysers during periods of constrained supply. This solution has gone a long way towards alleviating pressure on the national grid and freed up to 110 MW of

Buoyed by the success of these interventions, City Power also rolled out technology called 'time-of-use', which is a dynamic tariff pricing system that prices electricity at a premium during peak periods when the pressure on the grid is high and at discounted rates during off-peak periods. Time-of-use encourages usage of electricity during off peak periods by incentivising customers.

www.citypower.co.za



Phil Dingle (marketing director of Lucy Electric); Aubrey Mochela (general manager IT at City Power); Sicelo Xulu (MD at City Power); and Yumna Sheik (spokesperson for City Power).



LOOK OUT FOR OUR WINTER SPECIALS AT YOUR NEAREST ELECTRICAL WHOLESALER



A MEMBER OF THE **HUdaco** GROUP

Johannesburg: 011 392 3804

Cape Town: 021 552 5242

Email: sales@three-d.co.za

Durban: 031 263 7800 Website: www.three-d.co.za





BUYERS'

MANUFACTURERS CONTACTS CABLE SECURING PRODUCTS CABLE MARKING HellermannTyton
Full range of cable marking systems Magnet Electrical Supplies ABB South Africa Full range of cable securing products Aberdare Cables Lapp Group SA
Cable securing products Major Tech Werner Grobb JDL Electric Full range of cable marking systems Allbro Industries Alvern Cables MCE Electric Legrand Lapp Group SA Atlas Group Full range of cable marking systems Colson cable ties Magnet Electrical Supplies
Full range of cable securing products Ausma Trading O-line $\begin{tabular}{ll} \textbf{Legrand} \\ \textbf{CAB 3, Logicab 2 and Duplix identification and marking systems for} \\ \end{tabular}$ Brady South Africa Phambili Interface Central Support Systems Major Tech Plasti-Loc cable ties from miniature to extra heavy duty – available in nylon 6/6 in black and natural **Magnet Electrical Supplies** Crabtree Electrical Accessories Full range of cable marking systems **Pratley** Eldon Kruger Phambili Interface Full range of cable marking systems Eurolux O-line Eaton Electric Full range of cable securing products Radiant Lighting Philip van der Westhuize Phambili Interface
Full range of cable securing products Stone Stamcor Range of cable marking systems HellermannTyton Sabelco Electrical Lapp Group SA **Three-D Agencies**Full range of cable markingsystems Marc Moream/Thea Diedericks **Pratley**Full range of cable securing products Legrand Schneider Electric O-line Three-D Agencies Full range of cable marking systems Pratley Full range of cable securing products South Ocean Electric Wire Company Radiant Lighting **Voltex**Full range of cable securing products **BUSBAR TRUNKING SYSTEMS** Sabelco Electrical Stone Stamcor Schneider Electric **CABLE GLANDS ARB Electrical Wholesalers** Surge Technology Stuart Ashton South Ocean Electric Wire Company Full range of busbar trunking systems Stone Stamcor **Aberdare Cables**Full range of cable glands **Bellco**Full range of busbar trunking systems Three-D Agencies Surge Technology JDL Electric Full range of busbar trunking systems Three-D Agencies **ACDC Dynamics** Tulisa Cables Full range of cable glands Tulisa Cables David Macfadyer ACTOM Electrical Products CCG and Pratley glands and shrouds Versalec Cables Versalec Cables Complete distribution systems for currents up to 5 000 A, whether used to connect transformers to the main LV distribution board, to supply power to the server racks or lighting ARB Electrical Wholesalers Voltex **DISTRIBUTORS** Hugh Ward MCE Electric Atlas Group Full range of cable glands MCE busbar insulators; MCE busbar accessories; MCE slotted trunking; Onesto insulated busbars Voltex LSis **ACDC Dynamics** Voltex MV/IV Solutions **ARB Electrical Wholesalers** Sabelco Electrical Full range of cable glands Full range of busbar trunking systems **ACTOM Electrical Products** Citilec **Waco** Jaco Coetzee **Voltex**Full range of busbar trunking systems Allbro Industries Full range of cable glands Alvern Cables Eaton Electric Full range of cable glands Voltex LSis **CABLE FAULT LOCATION TEST EQUIPMENT ARB Electrical Wholesalers** Full range of busbar trunking systems Elen Electrical Enclosures Atlas Group Voltex MVLV Solutions
Full range of busbar trunking systems Ausma Trading **ACDC Dynamics**Full range of cable fault location test equipment **HellermannTyton**Full range of SABS approved cable glands Bellco ARB Electrical Wholesalers
Full range of cable fault location test equipment **EARTH BARS** Cabstrut JDL Electric Central Support Systems Full range of cable glands Atlas Group Full range of cable fault location test equipment ACDC Dynamics Full range of earth bars Citilec **Lapp Group SA**Full range of cable glands Crabtree Electrical Accessories **Bellco**Full range of cable fault location test equipment **Allbro Industries** Full range of earth bars **Legrand**ISO glands and PG glands Eaton Electric Citilec ARB Electrical Wholesalers Elen Electrical Enclosures Magnet Electrical Supplies Full range of cable glands Full range of cable fault location test equipment Full range of earth bars HellermannTyton JDL Electric **Atlas Group**Full range of earth bars Jaycor International Full range of cable fault location test equipment **O-line**Full range of cable glands Magnet Electrical Supplies
Full range of cable fault location test equipment Bellco **Pratley**Full range of cable glands and junction boxes Magnet Electrical Supplies Full range of earth bars Major Tech Eaton Electric Major Tech **Three-D Agencies**Full range of cable glands $\rm MT195-cable$ meter; $\rm MT196T-cable$ identifier; $\rm MT915-two-in-one$ cable finder and digital multimeter Full range of earth bars MCE Electric JDL Electric Phambili Interface Surge Technology Megger – PFL range and Easy Thump Voltex Full range of earth bars Sabelco Electrical Full range of cable glands Legrand Voltex
Cable fault location test equipment **Waco Industries**Full range of cable glands Schneider Electric Distribution blocks **Shorrock Automation** Full range of Econo board earth bars: 4-, 6-, 8-, 10-, 12-, 15-, and 18-modules Stone Stamcor DUCTING **CABLE JOINTS** Surge Technology MCE Electric
Onesto DIN rail earth bars; MCE fully insulated earth bars Three-D Agencies **ACDC Dynamics**Full range of ducting **Aberdare Cables**Full range of cable glands Versalec Cables Sabelco Electrical ACDC Dynamics **ARB Electrical Wholesalers** Voltex Full range of cable joints Waco **Voltex** Full range of earth bars ACTOM Electrical Products
RELCO MV paper cable joint boxes; cast iron joint boxes; heatshrink **Atlas Group** Full range of ducting **CONTACTS Waco** Full range of earth bars jointing and termination range; cold shrink jointing and termination **Bellco**Full range of ducting **ARB Electrical Wholesalers ABB South Africa NEUTRAL BARS** Cabstruct Mark McCulloch Atlas Group
Full range of cable joints Full range of ducting Central Support Systems Full range of ducting **ACDC Dynamics Bellco**Full range of cable joints Full range of neutral bars Allbro Industries Full range of ducting Citilec Full range of neutral bars **ACTOM Electrical Products** Full range of cable joints Crabtree Electrical Accessories
Full range of ducting and fittings **ARB Electrical Wholesalers** Eurolux Size 1 to 50 joining kits Allbro Industries **IDL Electric** Atlas Group Full range of neutral bars Full range of ducting

ACDC Dynamics Aberdare Cables

Alvern Cables ARB Electrical Wholesalers

Atlas Group Ausma Trading **Bellco** Fred Wilson

Brady South Africa Morne Louw Cabstrut

Juanita Kanagan Central Support Systems Faruk Cassim

Citilec Jeff Forman

Crabtree Electrical Accessories

Eaton Electric Andy Kapral

Elen Electrical Enclosures

Eurolux Andrew Wex HellermannTyton Jaycor International Greg Pokroy JDL Electric Shaun Singh

Lapp Group SA Mark Dilchert **Legrand** Johan Bosch

Full range of ducting Voltes Full range of ducting

CARLE SECLIPING PRODUCTS

Full range of DLP perimeter trunking

Legrand

Waco

O-lineFull range of ducting

Phambilie Interface

Three-D Agencies

CableGuard: Unique conductor marking

ACDC Dynamics
Full range of cable securing products **ACTOM Electrical Products** BBS cable clamps and wedges for mine shafts

ARB Electrical Wholesalers Full range of cable securing products **Atlas Group**Full range of cable securing products

Ausma Trading Cable ties Full range of cable securing products Cabstrut

Full range of cable securing products Full range of cable securing products

HellermannTytonFull range of cable securing products

HellermannTytonFull range of cable jointing products

JDL Electric Full range of cable joints

Magnet Electrical Supplies Full range of cable joints

O-lineFull range of cable joints Three-D Agencies **Voltex** Full range of cable joints

Full range of cable joints

CABLE MARKING

Aberdare Cables Unique conductor marking; sheath embossing

ACDC DynamicsFull range of cable marking systems **ACTOM Electrical Products**

Full range of cable marking systems

ARB Electrical Wholesalers

Alstom Electrical ProductsFull range of cable marking systems **Atlas Group**Full range of cable marking systems

BellcoFull range of cable marking systems Brady South Africa

Cable and wire marking solutions, labels and markers, printers, software

Full range of cable marking systems Eaton Electric Full range of cable marking systems

Full range of neutral bars **Eaton Electric**Full range of neutral bars

JDL Electric Full range of neutral bars

Legrand

Distribution blocks

Major Tech

Neutral bars: 4-, 6-, 8-, 10-, 12-, 15-, and 18-modules

Onesto DIN rail neutral bars; MCE fully insulated neutral bars

Sabelco Electrical Full range of neutral bars

Voltex

Full range of neutral bars

Voltex LSis
Full range of neutral bars

LV CABLES

Aberdare CablesFull range of LV cables

ACDC Dynamics Full range of LV cables

ACTOM Electrical Products
Armoured LV 1.5 – 16mm² Bells cables (SWA and ECC); armoured LV 25 – 300mm² mains cables (SWA and ECC); aerial bundled conductors (ABC) and Airdac; Interdac 1.9/3.3 kV cables; GP housewire,

steel reinforced (ACSR); low and halogen-free cables for mining

Alvern Cables Stranded and flexible, SWA, housewire, Alfix, Alvex ARB Flectrical Wholesalers

Surfix and flat twin; bare copper earth wires; aluminium conductors

Atlas Group Full range of LV cables

GUIDE

LV CABLES **CABLES FOR HARSH ENVIRONMENTS Jaycor International**Full range of lugs, ferrules, connectors, pre-insulated terminals Elen Electrical Enclosures Full range of LV cables Evroard: Lohal: Lotox: Evsure ACTOM Electrical Products
Suppliers of anti-termite cables; silicone single wires and cabtyres;
HO7RN-F rubber cables JDL Electric Full range of lugs, ferrules, connectors, pre-insulated terminals Citilec Full range of LV cables Eaton Electric **Legrand** Starfix ferrules Full range of LV cables **Alvern Cables**Polyolifin and XLPE Magnet Electrical Supplies
Full range of lugs, ferrules, connectors, pre-insulated terminals **Jaycor International** Full range of LV cables ARB Electrical Wholesalers **Legrand**Cablofil cable trays Full range of cables for harsh environments JDL Electric MCE Electric **Atlas Group**Full range of cables for harsh environments Full range of LV cables MCE insulated and uninsulated terminal bars **South Ocean Electric Wire Company** Full range of LV cables Full range of lugs, ferrules, connectors, pre-insulated terminals Stone Stamcor Bellco Full range of cables for harsh environments **Pratley** Full range of lugs, ferrules, connectors, pre-insulated terminals **Tulisa Cables**Full range of LV cables Full range of cables for harsh environments Full range of cable ladders, cable trays Versalec Cables Full range of LV cables Copper/aluminium compression lugs and ferrules; supply of specialised connectors to customers' requirements; supply of KS pre-Eurolux Hazardous area lighting **Voltex**Full range of LV cables Jaycor International Full range of cables for harsh environments **Three-D Agencies**Full range of lugs, ferules, connectors, pre-insulated terminals **MV CABLES** Full range of crimp tools and cutters Full range of cables for harsh environments **Voltex** Full range of lugs, ferrules, connectors, pre-insulated terminals **Lapp Group SA**Full range of cables for harsh environments **Aberdare Cables** Full range of MV cables SPECIALISED CABLES Full range of crimp tools and cutters **ACTOM Electrical Products** Distributors of full drums and lengths cut to size: paper insulated lead cables (PILC); cross-linked polyethylene (XLPE); MV aerial bundled Full range of cables for harsh environments Aberdare Cables **Versalec Cables**Full range of cables for harsh environments Fyrsure; Waterblocked XLPE conductors (ABC) Bellco ACTOM Electrical Products
Full range of specialised cables on request **ARB Electrical Wholesalers** Full range of MV cables Full range of cables for harsh environments **Atlas Group**Full range of MV cables Alvern Cable TRAILING CABLES Railway specification **ARB Electrical Wholesalers** Full range of MV cables Full range of specialised cables JDL Electric Elastomeric insulated cables: flexible cable (types H05 RN-F, H07 RN-F); welding cable, mining trailing cable (up to 33kV) **Atlas Group**Full range of specialised cables Full range of MV cables **Lapp Group SA**Full range of tools and equipment cutters Eaton Electric Full range of MV cables ACDC Dynamics **Bellco**Full range of specialised cables Full range of trailing cables Legrand Jaycor International Full range of MV cables ACTOM Electrical Products Rubber and PVC trailing cables **Jaycor International**Full range of specialised cables **Magnet Electrical Supplies** Alvern Cables JDL Electric JDL Electric Full range of crimp tools and cutters Full range of MV cables Full range of specialised cables Major Tech Magnet Electrical Supplies Full range of MV cables **Lapp Group SA**Full range of specialised cables ARB Electrical Wholesalers ratchets with release mechanism for guaranteed optimum crimping with controlled calibrator assembly to comply with ISO 9000 standard Full range of trailing cables Atlas Group
Full range of trailing cables Versalec Cables requirements MCE Electric cat 5e, fibre optic and wi-fi solutions as well as enclosures Voltex
Full range of MV cables Full range of trailing cables **Surge Technology**Surgetek safety earthing cables for personal electrical safety Phambili Interface Full range of crimp tools and cutters **Citilec**Full range of trailing cables CONDUIT Versalec Cables Stone Stamcor
Distributor of Burndy hydraulic compression equipment; Klauke Full range of specialised cables Jaycor International Full range of trailing cables **ACDC Dynamics** crimping tools and cable cutters Full range of specialised cables Full range of conduit JDL Electric Full range of trailing cables **ACTOM Electrical Products** PANEL WIRING, TERMINALS AND TERMINAL BLOCKS All PVC and steel conduit and fittings **Lapp Group SA**Full range of trailing cables Three-D Agencies ARB Electrical Wholesalers ABB South Africa SNK and SNA ranges: screw; PI-spring (push-in); ADO systems (IDC); **Magnet Electrical Supplies Voltex**Full range of crimp tools and cutters **Atlas Group**Full range of conduit Full range of trailing cables pluggable, etc Aberdare Cables Ausma Trading PVC conduit Full range of trailing cables Slipdac; panel flex; Nitrile panel flex South Ocean Electric Wire Company ACDC Dynamics Full range of trailing cables Full range of panel wiring, terminals and terminal blocks Full range of conduit **ACTOM Electrical Products**Full range of single and multi-core panel wires Full range of trailing cables **Citilec**Full range of conduit Atlas Group Full range of cable trench covers **FLEXIBLE CABLES Alvern Cables** Crabtree Electrical Accessories Conduit; compact mini trunking; cable line trunking; accessories for trunking; PVC conduit accessories; flexible conduit Single flex and Panel flex cables **Bellco**Full range of cable trench covers **ARB Electrical Wholesalers** Aberdare Cables Full range of panel wiring, terminals and terminal blocks JDL Electric **Eaton Electric** Power flex single core cable Full range of cable trench covers **Atlas Group**Full range of panel wiring, terminals and terminal blocks Full range of conduit ACDC Dynamics
Full range of flexible cables **Bellco**Full range of panel wiring, terminals and terminal blocks 20 mm and 25 mm conduit **ACTOM Electrical Products** HellermannTyton
Full range of flexible conduit Welding cables, cabtyres, trailing cables, panel wires, submersible THREE-D Full range of panel wiring, terminals and terminal blocks JDL Electric **ARB Electrical Wholesalers Citilec**Full range of panel wiring, terminals and terminal blocks Full range of conduit **Lapp Group SA**Full range of conduit **Alvern Cables** +27 11 392 3804 Cabtyre, Permo power, Ripcord **Eaton Electric** Full range of panel wiring, terminals and terminal blocks Magnet Electrical Supplies **Atlas Group**Full range of flexible cables Full range of conduit **HellermanTyton**Full range of panel wiring, terminals and terminal blocks Ausma Trading
Full range of flexible cables Full range of conduit Jaycor International Full range of panel wiring, terminals and terminal blocks Radiant Lighting
Full range of conduit **Bellco**Full range of flexible cables Viking 3 junction blocks Schneider Electric +27 10 202 3300 Full range of flexible cables Magnet Electrical Supplies Flexible corrugated conduit Full range of panel wiring, terminals and terminal blocks **Jaycor International**Full range of flexible cables South Ocean Electric Wire Company MCE Multi-pole distribution blocks: Morsettitalia DIN terminal blocks Three-D Agencies
Full range of conduit JDL Electric Full range of flexible cables

TELECOM, INSTRUMENTATION AND CONTROL **CABLES**

Aberdare Cables Multicore cable

Full range of conduit

Full range of conduit

ACTOM Electrical Products

Full range of telecom, instrumentation, and control cables ARB Electrical Wholesalers

Full range of telecom, instrumentation and control cables

Atlas Group
Full range of telecom, instrumentation and control cables

Full range of telecom, instrumentation and control cables

Full range of telecom, instrumentation and control cables

Jaycor InternationalFull range of telecom, instrumentation and control cables

JDL Electric

Full range of telecom, instrumentation and control cables

Full range of telecom, instrumentation and control cables **Major Tech**Cable and Lan testers for the telecommunications industry

Full range of telecom, instrumentation and control cables

Lapp Group SA

Full range of flexible cable

Full range of flexible cables

Sabelco Electrical Full range of flexible cables

South Ocean Electric Wire Company Full range of flexible cables

Full range of flexible cables

LUGS, FERRULES, CONNECTORS, PRE-INSULATED

TERMINALS

ACDC DynamicsFull range of lugs, ferrules, connectors, pre-insulated terminals

ACTOM Electrical Products ARB Electrical Wholesalers

Full range of lugs and ferrules

Atlas GroupFull range of lugs, ferrules, connectors and pre-insulated terminals

Full range of lugs, ferrules, connectors and pre-insulated terminals

Full range of lugs, ferrules, connectors, pre-insulated terminals

Full range of SABS-approved lugs, ferrules, connectors, pre-insulated

HellermannTyton Full range of lugs, ferrules, connectors, pre-insulated terminals

LUGS, FERRULES, CONNECTORS, PRE-INSULATED

Full range of panel wiring, terminals and terminal blocks

Phambili Interface Full range of panel wiring, terminals and terminal blocks

Full rang eof panel wiring, terminals and terminal blocks

South Ocean Electric Wire CompanyFull range of panel wiring, terminals and terminal blocks

Three-D Agencies Full range of panel wiring, terminals and terminal blocks

VoltexFull range of panel wiring/terminals and terminal blocks

ACDC DynamicsFull range of cable ladders, cable trays **ACTOM Electrical Products**

All cable ducting and trays **ARB Electrical Wholesalers**

CABLE LADDERS, CABLE TRAYS

Full range of cable ladders and cable trays **Bellco**Full range of cable ladders, cable trays

Cabstrut Powerack weld-free cable ladder; return flange cable tray; welded wire mesh tray $% \left(1\right) =\left(1\right) \left(1\right)$

Central Support SystemsFull range of cable ladders, cable trays

Citilec Full range of cable ladders, cable trays Eaton Electric Full range of cable ladders and cable trays

CABLE LADDERS, CABLE TRAYS

EBO cable ladder and cable tray in GRP (glass fibre reinforced

Grafoplast Interflex cable trays and cable baskets

JDL Electric Full range of cable ladders, cable trays

Full range of cable ladders, cable trays

Brady cable identification systems

CRIMP TOOLS AND CUTTERS

ACTOM Electrical Products

ARB Electrical Wholesalers

Atlas GroupFull range of crimp tools and cutters

Full range of crimp tools and cutters

Full range of crimp tools and cutters

HellermannTyton
Full range of crimp tools and cutters

Full range of crimp tools and cutters

Full range of high quality drop forged crimpers featuring integral

MCE tools, crimpers, cable cutters and wire strippers

Surge Technology Haupa manual and hydraulic crimping tools and cable cutters

Full range of crimp tools and cutters

CABLE TRENCH COVERS

ARB Electrical Wholesalers Full range of cable trench covers

Full range of trench covers







+27 11 677 2500





+27 11 334 2737

+27 11 874 7600

HellermannTyton +27 11 879 6600 *iajor*





ADIAN

+27 11 386 0000

WEBBERS

+27 11 837 2600

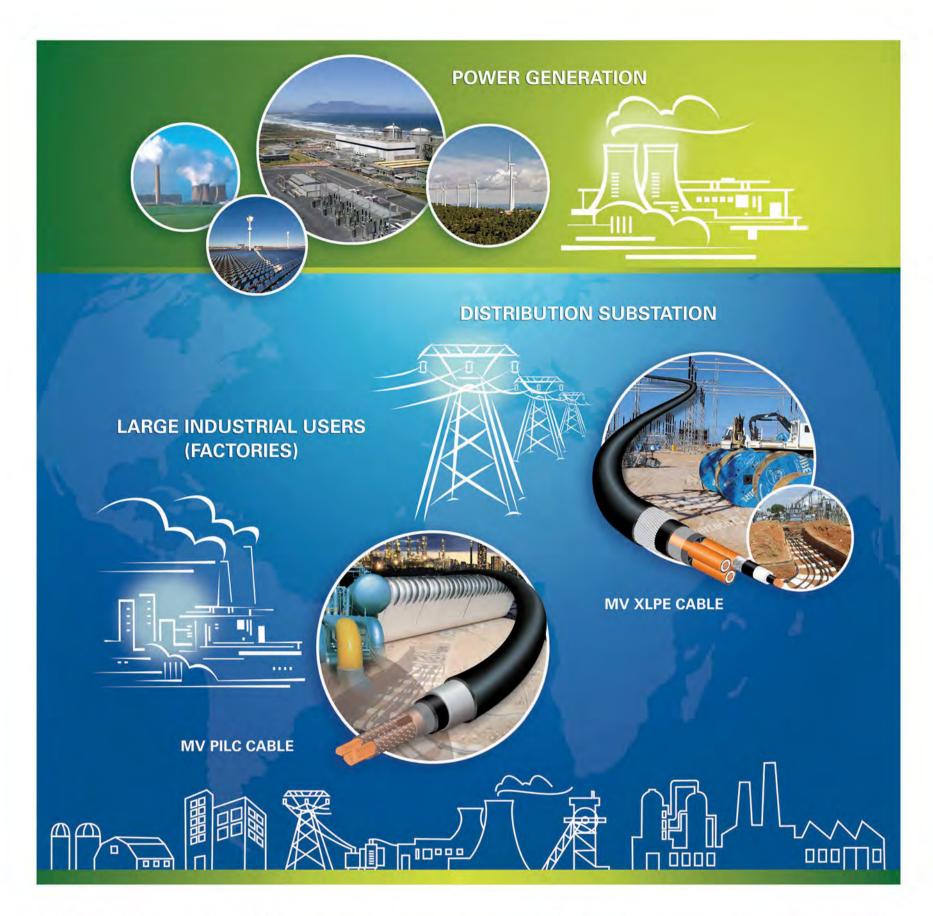




D-line

+27 11 378 3700





Medium Voltage Power cables you can trust

Aberdare Cables, a leading cable manufacturer since 1946, brings you medium voltage electric cable of the highest standard in quality, safety and reliability.

Paper insulated lead covered (PILC) cables and cross-linked polyethylene (XLPE) cables are used in many electrical distribution and reticulation applications including: • Municipal distribution • Mining (special construction with water blocking as well as flame retardency for shaft installations available) • Petrochemical industry • Wind farms

181A Barbara Road, Elandsfontein, Gauteng P.O. Box 1679, Edenvale, Gauteng 1610, South Africa Tel +27 (0)11 396 8000 Fax +27 (0)11 396 8010 www.aberdare.co.za











NEW CABLE AND PIPE LOCATOR OFFERS ADVANCED SIGNAL ACQUISITION AND

FILTERING TECHNOLOGY

BUILT on a proven design and with Pathfinder SAF Technology at its core, the 8879v3 offers Rycom's most advanced signal acquisition and filtering technology. The 8879v3 cable & pipe locator offers a utility locator FrequencyFlex allowing users to adapt the system to their specific needs. Multiple active frequencies allow the user to accurately locate the cable and pipe with minimum interference and maintain the ability to continue locating past faults and around conduit bends. Passive frequencies identify 'live' and charged lines by their naturally occurring electromagnetic fields. The 8879v3 offers multiple passive frequencies - a 50 Hz, 60 Hz, radio frequency, cathodic protection rectifier and CATV – allowing line locating without the use of a transmitter. Updated transmitter functions include improved transmitter induc-

tion, multi-frequency coupled induction ranging from 8 kHz to 118 kHz, and automatic impedance matching for direct connections. The 5 W and 10 W $\,$ transmitters have the ability to simultaneously apply an two frequencies to a utility. From one transmitter setting the user can locate the main line as well as other services by 'lighting up' the entire site. This set-and-forget feature streamlines operation by reducing the need to repeatedly relocate the transmitter. All functions are accessed via weather-proof

membrane buttons and both user input and transmitter status are verified with audible responses. The ergonomically designed and balanced 8879v3 receiver provides instant push-button depth up to 7,6 m and current measurement to help identify target utilities in crowded easements. Proximity cues to the tracing signal are given to the user through either peak or null tone modes while the backlit digital display provides both relative and actual signal strength. The 8879v3 can quickly and simply locate line when faults when used with the optional 'A-frame' GRP (ground return probe). As the operator moves towards the fault the receiver will respond with rapidly peaking signal. When the 'A-frame' is placed directly over the fault, the receiver will provide a null response. Conduit pinches can be located using the optional Sondes. Operating on active frequencies of 512 Hz, 640 Hz, 815 Hz, 8 kHz, or 33 kHz Rycom Instruments Sondes are pushed into non-pressurised conduits and pipes until they reach the point of pinch or blockage. Traceable 7,6 m in the air and 3 m in cast iron, the 8879v3 receiver will identify the precise location of the line blockage.

Rycom Instruments, Inc. services the global utility, telecom, pipeline and underground construction industries. Their full featured, tough and dependable range spans from premium locators for precision locators to simple low cost cable pathfinders.

Enquiries: +27 10 595 1831





Enclosures

comply with new IEC standards

LEGRAND'S range of XL3 modular power distribution enclosures complies with international IEC 61439 standards that have replaced the previous edition of IEC 60439.

"The certification of enclosures is defined by IEC 61439-1 and IEC 61439-2 for power switchgear and controlgear assemblies. This accreditation formulates the definitions, operating conditions, structural provisions, technical characteristics and tests for low voltage wiring accessory assemblies," explains says Marc Naidoo, projects and technical co-ordinator, Legrand SA.

"Modifications to these IEC standards encompass three different, but equivalent types for verifying requirements. These are verification by a test, verification by calculation or measurement, or verification by satisfying design rules. Unlike IEC 60439-1, conformity cannot be established simply on the basis of the general rules of the standard. Assemblies must comply with the specific standards dedicated to them. Compliance with standard IEC 61439-2 also enables the CE mark to be attached, if required."

There are 13 standard tests for the certification of pre-equipped enclosures, which are an additional guarantee of safe operation. Legrand is also committed to carrying out ten type tests, Characteristics that need to be checked include resistance of materials and parts, temperature rise, degree of protection (IP), dielectric properties and short circuit resistance, as well as electric shock protection and integrity of the protective circuit. Clearances and creepage distances, mechanical operation and electromagnetic compatibility are also important.

Standards IEC 61439-1 and IEC 61439-2 also require final checks on all wired assemblies. These checks certify that the essential characteristics linked to safety are fully complied with.

Legrand's XL³ cabinets and enclosures - for sites between 160 A and 6 300 A - provide solutions adapted to meet exact site power distribution needs in industrial, commercial and residential environments. Most importantly, these units comply with every part of the standard IEC 61439 to guarantee reliability and total protection of the installation.

XLPE Lugs - Reliability under high current



Crimping terminals for large power utilities.

HellermannTyton recently launched the new XLPE lugs that conform to SABS Class A 1803-1:2009. The XLPE lug has been designed specifically for use in the mining, power and utility industries.

Serving the electrical industry for 50 years, we have been supplying quality lugs, ferrules and terminals for the past 15 years.

Features and Benefits:

- Manufactured from 99% pure tin plated copper
- Available in all standard sizes
- Designed for medium and high voltage applications for XLPE cables
- HellermannTyton supplies a full range of crimping tools

Johannesburg Tel: (011) 879-6620 Fax: (011) 879-6603

Cape Town Tel: (021) 594-7100 Fax: (021) 594 7130 Durban Tel: (031) 492-0481 Fax: (031) 569-9909 Port Elizabeth Tel: (041) 408-2400 Fax: (041) 453-0336

E-mail: sales.jhb@hellermann.co.za









Enquiries: +27 11 444 7971





FASTER AUTOMATED CABLE IDENTIFICATION

BRADY'S Wraptor Wire ID printer applicator now offers even more automation opportunities. A new system software update al-

lows the integration of Schleuniger cut and strip machines with the Wraptor for faster cable preparation and handling. This will

enable faster workflows for operators. In cooperation with Schleuniger, the Brady Wraptor system software has been upgraded to allow full integration with Schleuniger cut and strip machines. This enables faster and more streamlined workflows for operators.

Increase quality and reduce cost

The Wraptor Wire ID Printer Applicator is a great tool to control manufacturing cost and enhance identification quality. In less than five seconds, the Wraptor prints and applies labels around wires and thus eliminates the need to print labels in advance and the time needed to apply them by hand. The Wraptor's technology enables 300 dpi prints for barcodes, logos and diagrams, and a tight label wrap around the wire, with minimal bubbling or wrinkling.

Easy to use

Without any adjustments, the Wraptor can identify cables from 1.52 mm up to 15.24 mm in diameter and apply labels with varying widths up to 50.8 mm, and lengths between 19.05 mm and 76.20 mm. A versatile tool, the

Wraptor can easily be transported to different workstations to identify

Coupled with Brady LabelMark software for easy label design, barcoding and serialisation, the Wraptor becomes a highly practical process efficiency increaser, even more so when integrated with Schleuniger cut and strip machines. Contact Brady at emea_request@bradycorp.com for a product sheet or more information.

Enquiries: +27 11 704 3295

a great variety of cables.





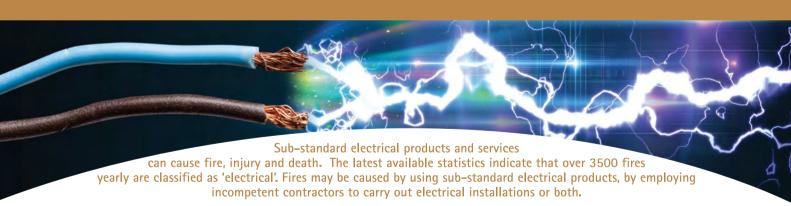
STAINLESS STEEL CABLE TIES KEEP ORDER ON SOLAR FARM TRANSFORMERS

Transformers have exposed cables running from all the devices that measure temperature, voltage and gases. These wires need to be effectively channelled to a central box using a strong, durable cable bundling solution, such as Banding & ID Solutions Africa's tough multi-lock cables, which are being used at a large solar project in the Northern Cape. "Band-It cable ties are made from high-strength, corrosion-resistant 316 stainless steel coated with Nylon 11, which has excellent chemical and weathering resistance for long life expectancy," says Banding & ID Solutions Africa business manager, Rosa Remendos, who adds that the multi-lock cable ties supplied by Banding & ID Solutions Africa ensure that the cables are organised, reducing the chance of communication loss from the transformers. Banding & ID Solutions Africa distributes and manufactures Band-It stainless steel strapping and buckles under license from USA-based Band-It-Idex.

Enquiries: +27 11 974 0424



ECC Armoured cable from 1,5mm to 240mm Aluminium Armoured cable from 16mm to 240mm



- Be aware that there are many sub-standard products and services on offer in South Africa.
- Membership of the SAFEhouse Association is your assurance of a code of conduct that demands compliance with regulations and responsible behaviour.
- It has become clear that the need for correct copper cabling and quality components in your home is indisputable.
- Copper is the most efficient ELECTRICAL conductor available.

COPPER THEFT

Copper theft has become a very lucrative market. The key driver of copper-cable theft is the rising demand for the metal as a result of excellent prices being offered by overseas consumers. The Copper Development Association Africa is passionate about copper and cares about our market. R11m worth of copper is stolen every month.

Our action plan is to see the following happen:

No cash for scrap
 Abolish VAT on scrap
 Introduce an export tax
 No export of ingot/billet



Copper Development Association Africa Copper Alliance



The CDAA is a proud member of Safehouse

Tel +27 11 824 3916 Fax +27 11 824 3120 Email info@copperalliance.org.za www.copperalliance.org.za

COMPLETE DESK CABLE CARRIER SYSTEM

subaki Kabelschlepp has added new desk top, floor and frame connections to its Protum Office PO240GS desk cable carrier system. This makes it a complete system allowing fast and easy mounting on office furniture. The weight of the freestanding floor connection provides increased stability and is primarily designed for a clean connection to the floor

"The new Protum Office system can be used on height-adjustable desks and on simple tables with four legs. Until now, Protum Office cable carriers were mainly used by manufacturers of office furniture who tended to install them in height-adjustable stand/sit workstations," explains Werner Eul, product manager cable carrier systems at Tsubaki Kabelschlepp.

Tsubaki Kabelschlepp has developed standard connections for desk tops, floor and desks. The table connections are screw-fixed directly to the underside of the desk top. The weight of the free-standing floor connection provides increased stability and is primarily designed for a clean connection to the floor. The alternative is a round or flat desk frame connection, which is suitable for height-adjustable desks..

Enquiries: +27 31 576 6329





MULTI-FUNCTION INSTALLATION TESTER SERIES HELPS PREVENT DAMAGE TO CONNECTED APPLIANCES

omtest, accredited southern African partner to Fluke - global leader in handheld electronic test and measurement equipment - has introduced the new 1660 series multifunction installation testers - the only installation testers that help prevent damage to connected appliances. Insulation pre-test, Fluke Connect compatibility and 'auto test' are three standout capabilities of this new family of

Insulation pre-test: The Fluke 1664 FC installation tester is the only installation tester with insulation pre-test, which warns users from making potentially serious and costly mistakes. If the tester detects that an appliance is connected to the system under test, it will stop the insulation test and



provide a visual warning. This helps eliminate accidental damage to peripheral equipment.

ShareLive™ calling allows communication of test results while the user is in the field. FlukeCloud storage records results without mistakes.

Auto Test for faster installation testing - eight key tests with one button press - and reduces test time up to 40%, as well as reducing potential errors.

The series has the following benefits:

- Fluke 1664 FlukeConnect* is the only installation tester that helps prevent damage to connected appliances, and allows users to wirelessly share results from the field.
- Fluke 1663 is ideal for professional users high-end functionality, advanced measurement capability, yet still easy to use. Operation is intuitive and easily mastered by all levels of field workers.
- Fluke 1662 is a solid, basic installation tester, giving the user reliability, simple operation and all the testing power needed for basic installation testing.
- FlukeConnect Certification has recently been obtained by Comtest for the sale of Fluke Connect products in South Africa.

For more information on Fluke's new 1660 Series Multifunction Installation Testers or info about seminars, demos or to locate the nearest dealer, contact Comtest at sales@comtest.co.za

Enquiries: +27 10 595 1821

Ultra tough rectangular junction

box for harsh environments

WITH no less than 10 x 20 mm cable entries, Pratley's brand new 'Rectangular Enviro Box' with a hinged lid is "a contractor's delight", says Pratley's marketing director, Eldon Kruger. "This is because the Enviro Box is ultraversatile, easy to install and, because it is rectangular, the box can be used to terminate almost anything - from multiple telephone cables to control circuits and power cables."

Kruger says Pratley has manufactured cutting-edge cable glands and junction boxes for more than 60 years and the company is wellknown for its vast range of electrical junction boxes, which are found in diverse environments from petrochemical plants to rural village

"After extensive research, we identified a need for an innovative rectangular box that is ultra-easy to install, accepts multiple cable entries and importantly, is able to withstand the rigours of harsh environments. The Rectangular Enviro Box forms part of Pratley's ever successful Enviro range of termination products, which are specifically designed for corrosive and unforgiving surroundings," explains Kruger.

"Pratley manufactures the Enviro can accommodate 12 x 6 mm Box from an ultra-tough, engineering polymer, which means that the Rectangular Enviro Box will not corrode or crack in extreme environments. It is available with a choice of either a black hinged-lid or a transparent Polycarbonate hinged-lid. Be-

never be left off after inspection of the electrical circuit. Also certified to the most stringent IP (Ingress Protection) level of IP68, the Enviro Box is completely dustproof and waterproof, even when submerged underwater up to

ing hinged, the lid is fully retained

meaning that it can

To complement the box's corrosion resistance and to maintain the IP rating, Pratley recommends it is used with the Pratley Envirogland range of cable glands. These are available for armoured and unarmoured cables.

two metres."

"Any unused entries can be blanked off with Pratley's innovative and ultra-easy to install 'clip-retained blanking plug'. Simply press the plug in and clip it into place. The junction box is supplied complete with a specially designed cranked-rail or an optional 35 mm DIN rail which Pratley Kwikblok terminals.

"Kwikblok terminals can be factory fitted to customers' requirements," concludes

Enquiries: +27 11 955 2190







FOCUS ON 'GREEN' ENERGY AND SUSTAINABLE SOLUTIONS

VERT Energy offers a complete power generation solutions service to diverse sectors, including mining, marine, telecommunications, agriculture, municipalities, general industry and critical power applications.

"The company's solutions service to genset manufacturers and electro-mechanical power transmission industries is geared to ensuring a dependable supply of electricity production throughout Africa," says Vert Energy's managing director, Grant Robertson. "Apart from the supply and support of power generation components

for diesel and gas engines, the company is also committed to sustainable development.

"Vert Energy's focus on renewable energy sources to produce 'green' energy as a reliable source of electricity, encompasses sustainable solutions for hydroelectricity, wind power and for steam and gas turbines.

"The company's extensive range of power generation components for the production of hydroelectric power – the main source of clean electricity globally – includes low, medium and high voltage Leroy Somer alternators, DEIF generator

controls. Asco changeover switches and Covrad heat exchangers."

The Leroy Somer Power alternator range, which is available exclusively throughout Africa from Vert Energy, has been designed especially for hydraulic turbine drives. LS Power alternators, with power ratings between 1 MVA and 20 MVA, are based on a modular design, with standard components, and can be adapted to different turbines and can be modified to suit exact site characteristics, including environmental and mechanical constraints.



LS Power alternators from Vert Energy have been designed especially for hydraulic turbine drives. These alternators, with power ratings between 1 MVA and 20 MVA, are based on a modular design, with standard components, and can be adapted to different turbines and can be modified to suit exact site characteristics, including environmental and mechanical constraints

LS Power alternators, which are an essential link in hydroelectric installations, conform with stringent international quality and safety specifications. This range is designed for horizontal or vertical mounting and has Class H insulation with F or B temperature rise class, a speed rotation 333 to 1800 min-1 and voltages from 400 V to 15 kV. These units withstand demanding operating conditions, including high overspeed and high axial or radial forces.

Vert Energy's alternators, generator controls, changeover switches and heat exchangers, which are installed in hydro power plants throughout Africa, are enhanced by a technical advisory, repair, maintenance and spare parts facility.

The company's support service includes assistance with inspections, diagnostics and repair procedures; re-assembly, installation and commissioning, as well as the implementation of preventative and predictive maintenance programmes.

Enquiries: +27 11 453 9669

GENSET DISTRIBUTOR APPOINTED



JB Switchgear Solutions was recently appointed as an authorised supplier of 'Efficient Power' diesel

JB Switchgear MD, Johan Basson says, "We find the requirement for full electrical solutions growing, due to the reduction of interfaces which are associated with split packages. The inclusion of Efficient Power's range of products will further enhance our offer to market."

These diesel gensets are the result of a manufacturing partnership between Efficient Power and the respected multinational company Sumitomo Corporation Africa. An extensive support and service network will provide customers peace of mind, backed with a full range of parts and service components.

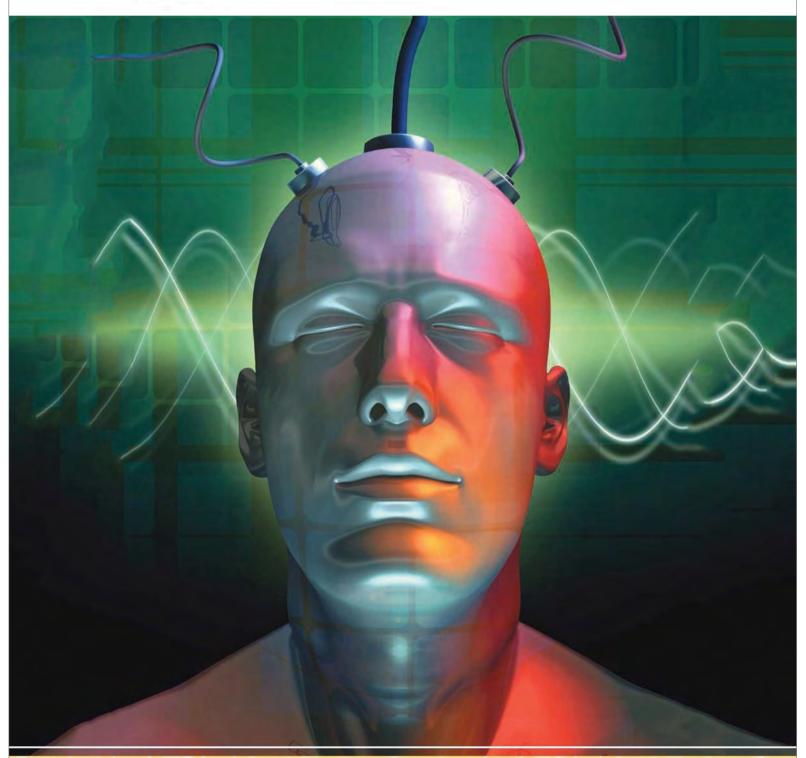
There are standard offerings for stand-alone or mains fail units from 62.5 kVA to 750 kVA, plus numerous multi-set solutions that can easily cover generation capacity up to 10 MVA and above.

"JB Switchgear Solutions was selected as an authorised distributor and reseller based on their longstanding working relationship with the Efficient Group," says Warwick Jackson, MD of Efficient Power.

Enquiries: +27 11 027 5804

Think Power, Think





Specialised chargers, batteries and solar systems

Silicon Engineering – South Africa's leading supplier and manufacturer of industrial batteries, chargers and monitoring systems since 1969. Advanced technology, International quality and expert reliability power the core of our business, whilst our wide and diverse range of industrial battery and charger products, and our cutting-edge monitoring systems, power the core of yours.

When it comes to Silicon Engineering's elite selection of products, services, solutions and support, only the best makes and most stringent quality controls and processes will do. We cover the full range of your charging, batteries and solar needs, according to your business's precise requirements and specifications.

Tel: 031 766-3369 / 011 474-3423 | www.silicon-online.co.za





SOLUTIONS THAT TRANSCEND CONVENTIONAL STANDBY SUPPLY

iesel generators have become the backbone of 'greener' and more cost-effective standby electrical power generation solutions.

Zest WEG Group is working closely with a number of developers in the commercial, industrial, hospitality and healthcare property market segments, as well as airport authorities, to design and install hybrid back-up energy supply systems that incorporate the benefits of diesel generators, solar photo voltaic (PV) technologies and conventional utility power.

"There is not a single building that does not rely on standby power, considering the limitations of existing grid networks in sub-Saharan Africa, and owners and asset management companies are looking for ways of lowering the operating costs of these assets," David Claassen, executive: integrated solutions at Zest WEG Group, tells Sparks.

Diesel generators remain the most reliable alternative to grid electricity, as they are able to operate permanently and are not dependent on intermittent fuel sources, such as solar photo-voltaic (PV) systems.

In order to operate when the sun does not shine, solar PV relies on expensive storage systems, which increase the upfront capital costs of alternative energy supply and the price of every kilowatt hour produced.

Conversely, diesel fuel is readily available

in the region and its quality has been steadily improving over the years driving the uptake of generators incorporating the latest efficient and clean engine technologies from European original equipment manufacturers.

However, Claassen says that the fixed cost of diesel used to generate electrical power can be "significantly reduced" by harnessing PV solar technologies.

"It is possible to reduce the cost of diesel fuel by half through incorporating solar PV technologies, which are powered by free fuel sources. In some instances, the two technologies can be operated simultaneously to reduce the overall load on the generator, resulting in significant cost savings," he says.

Zest WEG Group is also designing solutions that incorporate grid power, the most cost effective electrical energy available, at present.

As much as 60% of electricity supplied from the utilities can be supplemented by solar PV, with the generator acting as a final standby power solution.

It is not only large commercial businesses and industries that are adopting hybrid generation solutions. Claassen says the company is able to design and install systems incorporating generators starting at 20 kilovolt ampere (kVA) through to 1000 kVA that are used by heavy industries and mines.

These bespoke turnkey solutions are de-





veloped using Zest WEG Group's extensive load profiling and application engineering capacities, as well as the company's thorough understanding of its customers' unique energy requirements.

Clearly, the limitations in energy supply in the region are bringing innovative solutions to the fore that transcend temporary backup solutions, but rather talk to sustainability, decoupling and the smart and flexible grids of the future.

Enquiries: +27 11 723 6000

Load shedding: When a generator isn't the answer

GENERATORS are not always the answer to the questions posed by Eskom's punitive load shedding, says Jack Ward, managing director of Powermode, a power provisioning specialist.

He cites the challenge faced by many small businesses – particularly home offices – where the noise of a diesel- or petrol-powered generator piercing the quiet of a residential area or interrupting the thoughts of staff members deep in concentration is simply unacceptable.

Against this backdrop, what are the alternative solutions to address South Africa's increasingly unstable and unreliable power supply?

"The most cost-efficient and effective solution is an uninterruptible power supply (UPS) system," says Ward. "However, there are many options available, so users should take time to decide on the most appropriate offering in order to save unnecessary expenditure."

Critical equipment

"Firstly, users should determine if there is critical equipment that must remain powered 24/7 – such as important security systems and cameras. Or is the requirement simply to keep one or two personal computers and a couple of lights up and running during an outage that may last between two and four hours?"

Batteries

He explains that, in addition to UPS sizing, accurate calculations relating to the size and number of batteries in the UPS battery-pack play vital roles in determining the total number of hours of back-up time available.

Ward maintains that potential customers should become knowledgeable and well-informed in order to make circumspect power provisioning decisions. "Often, an installation's requirements depend on a number of less than obvious factors, such as the maximum possible load required, the average likely load and the level of redundancy that may need to be on the safe side," he says. "These parameters are key to UPS system selection."

Enquiries: +27 11 235 7708

UPS offers efficient, reliable protection to SMEs

Schneider Electric has announced the expansion of its Galaxy 300 uninterruptible power supply (UPS) system, which now includes 60 kVA and 80 kVA models.

Ideal for small and medium businesses, commercial buildings and technical facilities with small server rooms, the Galaxy 300 60 kVA and 80 kVA UPS systems provide effective and reliable three-phase power protection to prevent downtime and data loss for mission critical applications in a robust, simple-to-install and cost-effective configuration.

The new UPS systems also enable users to lower operational and cooling costs with power efficiency and total harmonic distortion of current at less than 3,5 percent with full load.

"There was a need expressed by our low- and medium-level power users for a system that offered greater power availability, reliability, manageability and convenience," says Bruce Grobler, vice president of the IT Business for southern Africa at Schneider Electric. "Serving a range of organisations, the addition of the 60 kVA and 80 kVA models, the Galaxy 300 10 to 80 kVA UPS portfolio directly answers customer and partner requirements by offering a best-in-class UPS with simplified installation, management and maintenance features, as well as enhanced efficiency and ease of use via an intuitive interface."

To ensure uptime and availability, the Galaxy 300 10 to 80 kVA portfolio allows for standard installation of one or two independent power sources, and utilises an online double conversion topology to provide true isolation between input and output with zero transfer time.

A built-in 100% rated bypass static switch prevents interruption by allowing load transfer to utility power during heavy overloads.

Connected equipment can be powered with two UPSes united in parallel to increase system redundancy. In addition, the system provides users with options for an integrated battery backup with up to 10 minutes of runtime, or a robust charger for external batteries on rack or in external cabinets that provides run times of up to four hours.

Designed for ease-of-use, users are able to monitor and manage power requirements locally and remotely through a simple web/simple network management protocol interface. The simple-to-read and highly graphical user interface provides mimic diagrams, audible alarms and is available in 18 languages.

The Galaxy 300 10 to 80 kVA UPS systems are also equipped with several features that enable simple installation as well as tools to streamline compliance, maintenance and serviceability over the system's service life. An accessible maintenance bypass allows for complete isolation of each part of the system without power interruption, and the system features push-open doors and slide out boards for effortless maintenance in confined spaces. For time saving installation, the compact wide or narrow tower configurations can easily be rolled into new or existing facilities, and all wiring connections are easily identifiable. Step-by-step guidance and intuitive menu screens enable fast setup and system navigation.

Additional features of the systems include:

- A dual mains input that allows for stand installation of one or two independent power sources;
- A power factor corrected input that prevents the need for oversizing cables, circuit breakers and generators;
- Runtime options for UPS systems with integrated and external batteries;
- Availability of three to three and three to single phase power configu-



rations for convenient power distribution; and

Restriction of the use of Hazardous Substances (RoHS) compliant.
 The Galaxy 300 10 to 80 kVA UPS systems are available via Schneider Electric channel partners and electrical contractors.

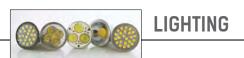
Enquiries: +27 11 254 6400

Extended Guaranteeson WEG Products









MAINTENANCE-FREE AND VERSATILE ITALIAN LIGHTING PRODUCTS

THE Fumagalli collection of quality outdoor lighting fixtures provides the ultimate 'fix and forget' solution to a host of lighting requirements. Eurolux, the local distributor for Fumagalli, recently added a few noteworthy new models to the range.

"Manufactured in a modern, state-of-the-art production facility in Varese, Northern Italy, Fumagalli lighting products are produced using only the highest quality raw materials and components," explains Shaun Bouchier, director at Eurolux. "The specialised resin formulation, which is used in all the Fumagalli products, is self-coloured and UV stabilised. This means that these fittings are virtually maintenance-free and will not discolour or fade, even in the brightest sunlight," explains Bouchier.

Lucia and Maddi

The latest Fumagalli bulkheads, now available from Eurolux, include the Lucia and Maddi LED bulkheads. The round Lucia is available with ring, eyelid and guard covers that are suitable for wall, ceiling and post installation. Its polycarbonate base is available, on request, in black, grey and white, and creates an elegant customised ambience. The Lucia is supplied with a LED light source ensuring uniform light distribution and, by adding the Remi Bracket, the fixture can be angled at 35°.

"The LED technology used in this product ensures that this is a cost-effective and environmentally friendly option, that can easily be upgraded and its built-in LED lamp makes for quick and easy lamp replacement."

The Maddi is an oval bulkhead, available with the same cover conversions as the Lucia and is also suitable for wall, ceiling and post installation. It is easily used in public spaces and residential areas, indoors and outdoors. The Maddi bulkhead can only be mounted vertically when used in conjunction with the Remi bracket

and provides a lifetime of 30 000 hours.

"In the Lucia and Maddi ranges, the eyelid cover is particularly popular, as the top half of the lamp is covered so the light is reflected downwards, thus reducing glare," adds Bouchier.

Danzi and Gelmi

Also included in the new Fumagalli range are the Danzi and Gelmi LED bulkheads, available in either a standard white or black finish with an opaque lens. The Gelmi can be used indoors and outdoors and is suitable for wall and ceiling mounting. The product has a protection rating of IP66 and is also available in an E27 version. The oval Danzi offers similar features and functionality to the Gelmi, with ring, eyelid and grid cover conversions also available on request.

Bouchier explains that the Fumagalli range of bulkheads is designed to be tough enough to withstand dust, water and the constant onslaught of the sun. "Because of their durable design and impressive lighting ability, you'll often find these bulkheads in underground car parks, on outside walls, inside warehouses and large commercial buildings. They are also ideally suited for use in coastal and harsh environmental conditions"

Extraleti

The Extraleti 100 surface fitting is supplied as standard with a long life and efficient TUV approved GX53 LED lamp (3W-

350lm). Available in four different cover options, allowing for a diffused or downwards directed light emission, this fixture is available in a cool or warm white option. It has a black finish with an opaque lens.

"The LED technology used in this product ensures this is a costeffective and environmentally friendly

effective and environmentally friendly option, that can easily be upgraded and its built-in LED lamp makes for quick and easy lamp replacement," explains Bouchier.



Stucchi

The Stucchi bulkhead is also manufactured from the same shockproof resin material as the rest of the Fumagalli range, offering UV ray stabilisation, whilst being rust and corrosion-free. This product has quite a versatile application, allowing for wall and ceiling installation, indoors and outdoors.

The range can be viewed on www.eurolux.com

Enquiries: +27 21 528 8400



NEXT GENERATION OF XLAMP XPG PLATFORM

P-G3 LED delivers more than 205 Lumens-Per-Watt Cree, Inc has introduced the XLamp XP-G3 LED, delivering 31% more lumens and 8% higher lumens per watt (LPW) than the industry-leading XP-G2 LED.

Leveraging key elements of Cree's SC5 Technology Platform, the high power XP-G3 LED improves the lumen density, voltage characteristics and reliability of previous XP-G generations. This best-in-class performance enables lighting manufacturers to deliver differentiated solutions at lower system costs for applications such as roadway, outdoor area, spot and high-bay lighting. "We are designing a new series of 130 lumens per watt high performance streetlights and the choice to use the new Cree XP-G3 LED was clear," says Wilbur Tarn, director of OrangeTeK. "The XP-G3 LED delivers high efficacy and high reliability in the familiar XP-G footprint, allowing us to modify elements of an existing design to shorten our design time by half."

Cree pioneered the industry standard high power 3535 form factor with the XP platform and continues to deliver breakthrough performance with the XP-G3, achieving over 205 LPW at 350 mA and up to 863 lm at 2 A. Extending reliability and lumen maintenance, the XP-G3 LED has 6 000 hours of LM-80 data immediately available that provides L90 lifetimes well beyond 50 000 hours, even at an extreme 105 °C, 1 500 mA test condition.

"Cree is committed to research and development that enables customers to deliver the best system value in the market with high-power LEDs," says Dave



Emerson, Cree vice-president and general manager, LEDs.

"The XP-G3 is the first LED in its class to shatter the 200 LPW barrier, setting a new benchmark for the XP-G class of LED and joining Cree's other highpower LEDs that deliver this level of performance."

The new LEDs are characterised and binned at 85 °C, available in ANSI white, EasyWhite three- and five-step colour temperatures (2 700 K to 6 500 K), and CRI options of 70, 80 and 90. Product samples are available now and production quantities are available with standard lead times

Enquiries: +27 11 923 9600

FOR MORE INFORMATION EMAIL: willie@superlume.co.za

SUPPLYING A FULL SPECTRUM OF LAMPS AND LUMINAIRES TO THE LIGHTING INDUSTRY

Tel: +27 21 706 4215

Fax: +27 21 706 0864

CAPE TOWN BLOEMFONTEIN KWAZULU NATAL

Tel: +27 31 266 5520

Fax: +27 86 750 7495

Cell: 082 452 5843

Tel: +27 82 400 7241

Fax: +27 86 693 3942

JOHANNESBURG

Tel: +27 11 614 5760

Fax: +27 11 618 3007



LED highmast retrofit for Eastern Cape townships

BKA Schréder has supplied a cost-effective and energy efficient LED lighting solution for the highmast floodlight retrofit project in Mdantsane, Dimbaza and Duncan Village, all suburbs in the Buffalo City Metropolitan area of the Eastern Cape. "With this project, the Buffalo City Metropolitan Municipality is leading the way of municipal energy efficiency," says BEKA's Peter Badenhorst.

A total of 150 highmasts with 1 000 W HPS floodlights were retrofitted with 470 W OMNIstar LED floodlights, resulting in a significant energy saving in excess of 50% per highmast, which ensured that the project qualified for a 100% energy efficiency funding by the Department of Energy.

Badenhorst explains that the Mdantsane, Dimbaza and Duncan

Village suburbs are located within the Buffalo City metropolitan boundary and that Mdantsane suburb is historically the second largest township in South Africa run by a single metro.

"Through this project, local residents not only benefit from their municipality's energy, and therefore fiscal, savings, but also through job creation. The contractor who did the installation is an empowered local company carrying out the municipality's street lighting maintenance and employs a wide spectrum of local employees, from electrical artisans to artisan's assistants, machine operators, general workers, storemen and administration staff," says Badenhorst.

"The OMNIstar is a high-power LED floodlight and has been designed to provide an unrivalled combination of performance and flexibility for lighting areas where high lumen packages are needed while offering maximum savings in energy and maintenance costs with a short payback time. With on-site photometric adjustment, the OMNIstar guarantees the perfect lighting to ensure safety and comfort. It offers a real alternative to luminaires equipped with high-power traditional sources, with the added advantages of an LED solution: low energy consumption, im-

LED designed to withstand peak voltages

THE Philips EcoBright LEDbulb delivers high quality light to ensure direct replacement of GLS bulbs in indoor applications. The beam of light is free of infra-red meaning no heat is radiated, and no ultraviolet light means that fabric and items under this light won't fade. The EcoBright LEDbulb offers over 90% energy saving and a longer lifetime of 10 000 hours (equivalent to 10 years if lit 2.7 hours per day for 365 days).

With load shedding in South Africa, switching between grid operation and generator operation generates a voltage peak, which can damage electronic devices and lamps. The EcoBright LEDbulb is designed to withstand peak voltages up to 2 000 V, while other conventional lamps may fail prematurely.

Design highlights

- Form factor is designed as a direct retrofit into A55 fixtures.
- Long lifetime of 10 000 hours.
- Warm white CCT 3 000 K and cool daylight 6 500 K.
- No UV and no IR.
- Environmental friendly, no mercury or any other hazardous substances.
- Low carbon footprint.

Application areas

The warm light makes it ideal for general lighting applications in the retail and hospitality industry and is suited to shops; corridors, stairways and washrooms; lobbies and reception areas; hotel rooms and bars; and residential applications.

Enquiries: +27 11 471 5000

proved visibility with white light, limited maintenance and longer life," explains Badenhorst. He adds that the OMNIstar can be fitted with the Owlet range of control solutions to enable further maximised energy savings by adapting the light levels according to the real needs of the installation.

"The residents' response to the new lighting installation was overwhelmingly positive," concludes Badenhorst.

BEKA Schréder is proud to be associated with the Buffalo City Metropolitan Municipality in providing a successful and highly energy-efficient lighting solution for this significant project.

Enquiries: +27 11 238 0036











10W Outdoor LED floodlight with remote

*Also available in 20W

JOHANNESBURG

72, 5th Street, Wynberg P.O. Box 590, Highlands North 2037, South Africa Tel: +27 (0)11 386 0000 Fax: +27 (0)11 448 1428

CAPE TOWN

Cnr Koeberg Road & Plattekloof Road Montague. Unit 5, West Building, Topaz Boulevard, Montague Park Milnerton, South Africa Tel: +27 (0)21 521 2500 Fax: +27 (0)21 557 5846

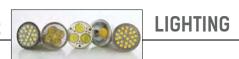
DURBAN

The Decorum Centre Shop 3, 1300 Umgeni Road Durban, South Africa Tel: +27 (0)31 263 0096 Fax: +27 (0)31 263 0344



www.radiant.co.za





LED HIGHBAYS REACH NEW HEIGHTS

IN its latest catalogue, Enlite has introduced a new super-efficient series of 110 lm/W LED highbays for 2016, called the Ariah™ range, which have been developed for various commercial or industrial applications and offer excellent energy efficiency, says Warwick Webber, Aurora's technical director. "We have designed this range of highbays using the latest in high performing LED technology and it offers an outstanding 50%energy saving compared with HID technology - and even more when dimming or using daylight and occupancy sensors, which lead to sig-

> nificantly reduced maintenance," explains Webber, adding that the range comes at a "superb price".

Surge protection and a low operating temperature

This range of 100 W, 150 W and 200 W highbays comes with 1.5 kV surge protection to help mitigate the problems experienced from power surges or fluctuations in quality of supply.

"The Ariah is ideal for use in warehouses, manufacturing, conference centres, industrial lighting, canopies and other commercial applications. Its high power factor 0.95* is a measure of just how effectively power is used," Warwick adds. With up to 22 000 Lumens to L70 50 000 hours, the highly efficient aluminium heatsink allows a low operating temperature of up to 50 °C.

Robust construction and design

Engineered for industry and designed to last, the Ariah is IP65 rated and its die-cast housing has an IKO8 impact rating for maximum protection in all environments. The 120 $^{\circ}$ beam angle comes as standard. Installation is by suspension or wall mounting on brackets.

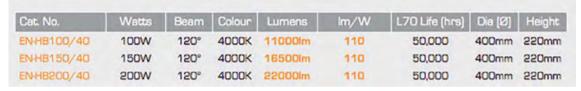
Offered with a five-year warranty, the Ariah can be used as a dimmable or non-dimmable luminaire.

He says the Ariah range can be found on pages 36 and 37 of the new Enlite Edition 4 catalogue or at www.enlitelighting.com.

Engineered by Aurora, an international LED lighting organisation that was voted 'Manufacturer of the Year' at the 2015 Lux Awards for its quality, value-for money products, Enlite is a brand of value-driven LED lamps and luminaires at competitive prices.

*Power Factor is the ratio of the real power to apparent power and represents how much real power electrical equipment utilises. It is a measure of how effectively electrical power is being used. It is always between 0.0 and 1.0 and commercial installations with a low Power Factor which are on a kVA tariff will have greater energy consumption than a similar installation with a high Power Factor.

Enquiries: +27 11 234 4878



LIGHTING THE WAY WITH INNOVATION AND COST SAVINGS

ajor Tech is a dynamic and innovative organisation is vital and ensures a safe environment - even if there is a that constantly keeps up-to-date with bright new ideas and products, says the company's Adrian Craddock. "Saving electricity remains a priority and we constantly strive to think 'out of the box' and offer energy efficient solutions to meet our clients' needs."

He says a part of Major Tech's success has been as a result of "innovative thinking, embracing new technology and promoting industry best practices".

"A great example," says Craddock, "is Major Tech's range of LED rechargeable emergency lights. Because good lighting

power failure - we have a number of versatile solutions. These LED rechargeable emergency lights illuminate automatically in the event of a power outage. They can also be used when there is no power to provide light in offices, warehouses and hotels as well as outdoors and at leisure environments such as camping areas.

LED rechargeable portable emergency lights

The REL60LED features 60 x 3.6 W LED lights, has a 12-hour charging time and an operating time of five to six

> hours. This slim, attractive lamp can be carried by hand or wall-mounted and it includes builtin discharge and overcharge protection. The light can be set at 100% power or at 80% when battery life needs to be preserved. It also features a 'rest' mode that is activated by switching to the 'off' position.

> The RSL216 LED rechargeable portable emergency light is ideal for hallways, bedrooms and staircases. It lights up automatically in the event of a power failure and provides light for up to two hours. This unit has an infrared motion sensor light that illuminates when motion is detected. This emergency light incorporates a day/night sensor to ensure it lights up only when required. The RS216 can also be used as a mobile torch and the two LEDs last up to 90minutes. This unit is designed for indoor use only and is powered through induction charging while plugged into the socket outlet.

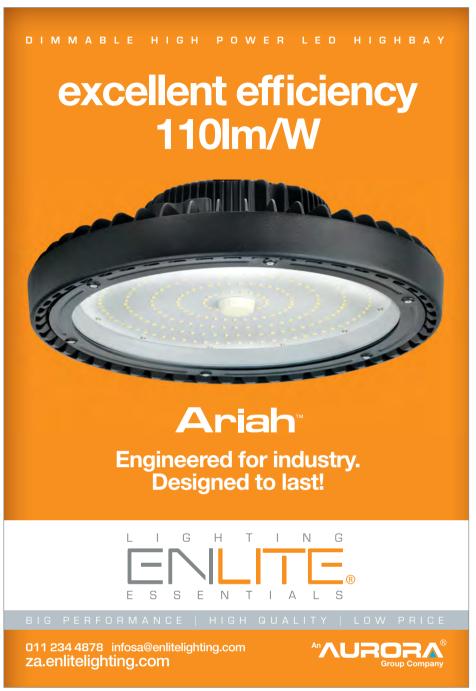
> Features include a flashlight; emergency power failure light; infrared motion sensor light; day/ night sensor; 16 plus two bright LEDs; a charge

time of six to seven hours; run time (16 LEDs - side) of six to seven hours; run time (two LEDs - top) of 90 minutes; and a sensor distance of 2 to

For more information, visit www.major-tech.com

Enquiries: +27 11 872 5500









PROUD DISTRIBUTOR AND MANUFACTURER OF **LIGHTING AND ELECTRICAL PRODUCTS**



Ausma will gladly supply the relevant certification to our customers on request.

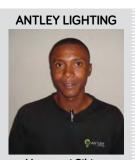
info@ausma.co.za

JOHANNESBURG

Q 28 Electron Avenue, Isando, Gauteng √ 011 392 1757

CAPE TOWN





Vusumuzi Sibiya, sales consultant.

WEBBERS ELECTRICAL

John Callaghan operations director.

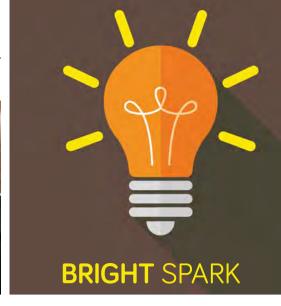


Michiel Coetzee commercial director.

SUBMIT your photos of new appointments and promotions to People on the Move at sparks@crown.co.za. All photos must be in jpeg format and high resolution (at least 1 MB when attached).

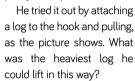


Scan this QR code to read the latest issue of Sparks Electrical News online.

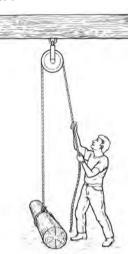


WEIGHTING IN VAIN

Mr Bloggs cut logs for a living. Although he weighed 100 kg himself, he could lift a weight of 150 kg with his bare hands. However, he wasn't satisfied with his own strength, so he installed a pulley to help him



How much could he lift if he stood out in the yard?



JUNE SOLUTION A QUESTION OF BALANCE

The total weight of all the sacks is 123 kg, so they would be balanced best if there were 61 kg in one pannier and 62 kg in the other. This is possible by putting 35 + 16 +11 = 62 in one, and 24 + 17 + 13 + 7 = 61 in the other.

AUGUST FEATURES

- Motor control centres and motor protection
- Energy Efficiency
- Lighting

Buyers' guide

• Lighting (lamps and controlgear)

- Advertising booking: 24 June 2016
- Editorial: 27 June 2016
- Advertising material: 4 July 2016

Editor:

Erika van Zyl

Advertising:

Carin Hannay

Anoonashe Shumba,

B.Tech Hons Creative Art & Design (CUT) Zim

Ian Jandrell PrEng,

BSc(Eng), GDE, PhD, FSAIEE, MIEEE

Publisher: Karen Grant

Deputy Publisher:

Wilhelm du Plessis Published monthly by:

Crown Publications cc P O Box 140 Bedfordview, 2008 Tel: (011) 622-4770

Fax: (011) 615-6108 e-mail: sparks@crown.co.za

Website: www.crown.co.za

Printed by: Tandym Print

The views expressed in this publication are not necessarily those of the editor or the publisher.

This publication is distributed to electrical contractors, wholesalers, distributors, OEMs, panel builders, Eskom, mining electricians and consulting engineers (electrical) as well as libraries, members





of IESSA and public utilities.





